

VIRGINIA.

PRIMARY TRAVERSE.

Arringdale, Aylett, Beaver Dam, Bermuda Hundred, Bowling Green, Boykins, Camp Abraham Eustis, Camp Humphreys, Cape Henry, Charles City, Dinwiddie, Disputanta, Doswell, Emporia, Heathsville, Holland, Homeville, Ivor, Jarratt, Kara, Kilmarnock, King William, Lawrenceville, McKenney, Montross, Morattico, Moyock, New Kent, Newport News, Petersburg, Piney Point, Port Royal, Richmond, Smithfield, South Hill, Suffolk, Surry, Tappahannock, Toano, Urbanna, Virginia Beach, Wellville, White Plains, Williamsburg, and Yorktown quadrangles.

BRUNSWICK, CAROLINE, CHARLES CITY, DINWIDDIE, ESSEX, FAIRFAX, GREENSVILLE, HANOVER, ISLE OF WIGHT, JAMES CITY, KING AND QUEEN, KING WILLIAM, MIDDLESEX, NANSEMOND, NEW KENT, PRINCE GEORGE, PRINCESS ANNE, SOUTHAMPTON, SURRY, SUSSEX, WARWICK, AND YORK COUNTIES.

The following geographic positions on North American datum were determined in 1916, 1917, and 1918, by J. J. Charters, J. C. Fales, F. J. McMaugh, E. L. McNair, J. J. Phelan, A. C. Schilling, H. J. Switzer, and J. H. Wilson, as indicated at the head of the several quadrangle lists.

For other positions in Virginia see U. S. Geological Survey Bulletins 122, 181, 245, 310, 440, 496, 551, and 644, and the unpublished records of the U. S. Coast and Geodetic Survey and the Chief of Engineers, U. S. Army.

ARRINGDALE QUADRANGLE.

Southwest along Southern Ry. through northwest corner of quadrangle. (By H. J. Switzer in 1918.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Trestle (A. J. 4.8), east end of.....	36	44	35.5	77	24	17.0	.....
Road crossing.....	36	44	02.5	77	25	04.3	5,091
Grizzard, about 200 feet west of depot, 15 feet north of track, 20 feet east of highway; iron post stamped "Prim. Trav. Sta. No. 10, 1918".....	36	43	28.6	77	26	21.3	7,145
Road crossing.....	36	43	23.0	77	26	42.9	1,844
Trestle (A. J. 1.5), east end of.....	36	42	57.0	77	27	06.2	3,250
Iron-pipe culvert.....	36	42	29.0	77	27	50.6	4,587
James River Junction, point of switch.....	36	42	13.3	77	28	28.3	3,461
Road crossing.....	36	42	13.0	77	28	41.2	1,051
Crossing, second-class road.....	36	42	12.1	77	29	23.1	3,413

Along highways.

Pipe culvert, center of.....	36	38	45.6	77	29	57.7	.....
Faison School, 135 feet north of north corner of, 38 feet west of road; iron post stamped "Prim. Trav. Sta. No. 1, 1918".....	36	38	22.9	77	28	32.0	7,353
T road west at R. F. D. box "Williams".....	36	37	54.9	77	27	46.5	4,664
T road west, front of store.....	36	37	21.6	77	27	04.8	4,790
Center of road, front of store.....	36	36	47.0	77	26	34.5	4,280
T road east.....	36	36	18.9	77	25	56.3	4,219
T road west.....	36	35	43.6	77	25	25.8	4,358
Intersection of roads to Haley's bridge and Gaskins.....	36	35	18.7	77	24	57.1	3,437
T road west.....	36	34	48.1	77	24	09.0	4,997
T road east.....	36	34	20.3	77	22	44.6	7,432
Intersection of roads.....	36	34	10.8	77	22	16.0	2,523
Hugo station.....	36	32	55.1	77	17	49.5	.....
Road crossing.....	36	33	08.0	77	17	21.1	2,653
Cattle guard, near schoolhouse.....	36	33	36.4	77	16	18.7	5,851
Road crossing.....	36	33	52.7	77	15	42.8	3,860

ARRINGDALE QUADRANGLE—Continued.

North along highways near east border of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Fect.
Culvert under road.....	36	34	37.3	77	16	13.8	.....
Culvert under road.....	36	34	39.9	77	16	38.8	2,055
T road north.....	36	34	38.1	77	17	09.0	2,468
Road south.....	36	34	56.7	77	18	29.6	6,841
Center of road, in front of store.....	36	35	24.7	77	19	19.6	4,962
Little Texas, in grass triangle, 15 feet south of telegraph pole; iron post stamped "Prim. Trav. Sta. No. 7, 1918".....	36	36	07.7	77	20	23.4	6,785
T road west.....	36	36	48.5	77	20	24.3	4,131
Center of road, opposite gate.....	36	37	49.5	77	20	02.3	6,422
T road west.....	36	38	09.0	77	19	41.9	2,585
Box culvert, center of.....	36	38	28.4	77	18	54.7	4,315
Fork in road, road south.....	36	38	38.8	77	17	55.0	4,981
Bradley's lane.....	36	39	08.4	77	17	37.0	3,333
Fork in road, roads north and east, line turns north.....	36	39	23.6	77	17	18.0	2,185
South end of small bridge.....	36	40	19.8	77	17	04.3	5,791
Center of small bridge over creek.....	36	41	01.5	77	17	05.9	4,221
Intersection of roads to Branchville and Drewryville.....	36	41	41.8	77	17	07.8	4,080
Intersection of roads to Drewryville and Emporia.....	36	42	16.3	77	18	21.2	6,923

West along Southern Ry. through north half of quadrangle.

Drewryville railroad station, 160 feet west of west end of, 10 feet south of south rail of south track; iron post stamped "Prim. Trav. Sta. No. 8, 1918".....	36	42	56.6	77	18	28.7	4,126
Road crossing, north rail at.....	36	42	58.8	77	19	10.9	3,439
Arringdale station, opposite east door of, center of south track.....	36	43	02.3	77	20	14.4	5,180
Farm-road crossing, north rail at.....	36	42	22.4	77	21	25.5	7,059
Culvert, 30-inch cast iron, near milepost 64.....	36	41	50.3	77	22	27.5	6,002
Adams Grove railroad station, 50 feet west of west end of, 6 feet north of track; iron post stamped "Prim. Trav. Sta. No. 9, 1918".....	36	41	34.8	77	23	12.6	3,994
Road crossing, north rail at.....	36	41	29.8	77	23	31.0	1,585
Road crossing, north rail at.....	36	41	31.9	77	24	06.9	2,932
Road crossing.....	36	41	31.3	77	24	53.9	3,826
Iron-pipe culvert, south rail at.....	36	41	40.3	77	26	19.8	7,058
Green Plain station, east end, on north rail.....	36	41	48.7	77	27	09.0	4,092
Road crossing, north rail at.....	36	41	58.9	77	27	46.3	3,211
James River Junction, point of switch at.....	36	42	13.3	77	28	28.3	3,718

Along highways near northeast corner of quadrangle.

Bridge 209 feet long, southeast end of (distance from Primary Traverse Station No. 8).....	36	43	16.3	77	18	34.0	2,037
Bridge 15 feet long, southeast end of.....	36	43	43.3	77	19	08.0	3,887
Bridge 12 feet long, south end of.....	36	43	53.6	77	19	26.1	1,807
Bridge, south end of.....	36	44	44.2	77	19	22.4	5,123

Along highways from Gaskins to Little Texas.

Meherrin River, west end of Haley's bridge over.....	36	34	12.0	77	21	43.0	2,701
Bridge 30 feet long, south end of.....	36	34	29.7	77	21	27.5	2,200
Culvert, 24-inch galvanized iron.....	36	35	09.0	77	21	15.4	4,106
Little Texas, Prim. Trav. Sta. No. 7 (previously listed).....	36	36	07.7	77	20	23.4	7,299

North along highways near Meherrin River.

Meherrin River bridge, 1.10 miles from junction of Gaskins-Margarettsville roads, 40 feet north of north end of bridge; iron post stamped "Prim. Trav. Sta. No. 6, 1918".....	36	33	05.8	77	22	06.2	.....
Logging railroad, crossing on.....	36	33	13.0	77	22	25.3	1,730
Fork in road, northwest.....	36	33	44.2	77	22	31.2	3,187
Intersection of roads (duplicate).....	36	34	10.8	77	22	16.0	2,968

Magnetic declination for east border of quadrangle, 4° 10' W.; for south border, 3° 54' W.; for center, 4° 10' W.; for southeast corner, 4° 30' W.

East along Southern Ry. (By J. J. Phelan in 1917.)

Drewryville, Prim. Trav. Sta. No. 8 (Switzer).....	36	42	56.6	77	18	28.7	.....
Milepost 59, south rail opposite.....	36	43	04.1	77	17	35.6	4,394
Center of road, at signboard marked "Drewryville 1 mile".....	36	43	05.7	77	17	18.9	1,383
Milepost 58, south rail opposite.....	36	43	04.5	77	16	31.4	3,869
Center of road crossing, 0.25 mile east of milepost 58.....	36	43	05.7	77	16	14.5	1,385
Center of road crossing, 0.20 mile west of milepost 57, south rail.....	36	43	10.7	77	15	34.6	3,285

AYLETT QUADRANGLE.

Along highways in extreme southwest corner of quadrangle. (By E. L. McNair in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Road forks, road northwest.....	37 45 58.0	77 14 42.6	.....
Crossroads, roads north and south.....	37 45 25.1	77 13 44.3	5,744

Along highways east to west through north half of quadrangle.

Prim. Trav. Sta. No. 27, 0.75 mile west of Dunbrooke.....	37 53 56.8	76 58 39.1	.....
Crossroads.....	37 53 52.9	77 00 32.0	.....
Road north.....	37 54 09.7	77 01 20.9	4,949
Indian Neck post office, road forks at, in line with road northwest to Newtown and southwest to Cauthornville.....	37 54 08.2	77 02 00.1	2,424
Road forks, center of small grassy triangle at.....	37 54 36.7	77 02 44.7	4,591
T lane southwest.....	37 54 28.5	77 04 07.4	6,681
T road southwest.....	37 54 38.2	77 04 25.7	1,768
T road northeasterly.....	37 54 59.6	77 06 18.8	9,323
T road northeasterly.....	37 54 41.2	77 07 23.0	5,471
Newtown, 60 feet east and 15 feet south of crossroads at, 15 feet south of road, 4 feet inside fence, in yard of T. J. Bates; iron post stamped "Prim. Trav. Sta. No. 33, 1916".....	37 54 48.8	77 07 41.4	1,661
T road north.....	37 54 57.4	77 08 43.8	5,080
Road fork, 70 feet east of old sign post.....	37 55 04.6	77 09 14.0	2,523
Road forks.....	37 54 39.8	77 10 42.3	7,509
Center of small wooden-truss bridge over Maracossic Creek, on line between King and Queen County and Caroline County.....	37 54 47.7	77 11 07.4	2,171
Road forks, road northeast.....	37 54 52.4	77 11 53.6	3,727
Gether post office and store, T road south at (junction point).....	37 54 59.7	77 12 24.3	2,567
Mattaponi River, center of wooden bridge over, line between Caroline and King William counties.....	37 54 09.2	77 12 58.2	5,783
T road corners, road north.....	37 52 46.9	77 13 13.5	8,418
T road corners.....	37 52 28.6	77 13 50.7	3,509
Duane post office, 15 feet north and 5 feet east of T road corners at, in line with road southwest, about 35 feet S. 60° W. from southwest corner of store; iron post stamped "Prim. Trav. Sta. No. 34, 1916" (junction point).....	37 52 01.1	77 14 49.0	5,437
Ford crossing small brook.....	37 52 26.0	77 14 59.5	2,657
Road forks in Doswell quadrangle.....	37 52 37.3	77 15 00.2	1,143

Magnetic declination for southwest corner of quadrangle, 5° 00' W.; for center of north half of quadrangle, 5° 00' W.

East along highways near north border of quadrangle.

Road forks.....	37 59 20.8	77 14 38.5	.....
Road forks, point is in line with roads in three directions.....	37 59 26.6	77 14 22.2	1,428
Sparta post office and store, 50 feet east of, 35 feet west of forks of road, across road opposite house of Dr. Campbell, on bank in front of house of Mrs. Rolfe (Rolfe estate); iron post stamped "Prim. Trav. Sta. No. 40, 1916".....	37 59 30.6	77 13 47.0	2,851
Mill race, center of small wooden bridge over.....	37 59 25.2	77 12 53.2	4,338
Road forks, road south.....	37 59 20.8	77 12 17.9	2,867
Road forks, road south.....	37 59 28.8	77 11 46.7	2,622
Road forks, road north.....	37 59 34.0	77 11 25.0	1,818
Crossroads.....	37 59 40.9	77 10 48.6	3,000
Alps post office, T road east at.....	37 59 31.7	77 10 45.2	966
Road forks.....	37 59 22.7	77 09 51.6	4,394
Small creek, center of wooden bridge over.....	37 59 29.9	77 09 10.3	3,381
Central Point, forks of road just east of church at, about 50 feet east of line of road going south.....	37 59 20.1	77 07 54.3	6,170
Central Point post office and store, 75 feet northeast of, 40 feet north and 3 feet east of T road corners, 1.5 feet inside fence in yard of M. W. Bird (colored); iron post stamped "Prim. Trav. Sta. No. 41, 1916".....	37 59 26.9	77 07 44.8	1,023
T road south, 160 feet east of bridge over small creek.....	37 58 50.5	77 07 09.4	4,641
Road forks, at old signboard.....	37 58 32.6	77 06 27.2	3,834
Crossroads, road north and second-class road south.....	37 58 31.1	77 05 07.4	6,400
T road east at store.....	37 58 29.2	77 04 12.4	4,405

AYLETT QUADRANGLE—Continued.

South along highways near west border of north half of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	
Prim. Trav. Sta. No. 40, Sparta post office.....	37	59	30.56	77	13	46.99	.....
Ford of small stream.....	37	58	54.6	77	13	33.0	3,801
Road forks, second-class road north.....	37	58	45.8	77	12	46.2	3,856
Road forks at colored church.....	37	58	13.3	77	12	33.4	3,441
Center of bridge over creek.....	37	57	27.9	77	13	21.9	6,017
Center of small wooden span bridge.....	37	57	13.8	77	14	00.2	3,390
T road west in woods.....	37	56	29.7	77	14	03.4	4,463
Bagby post office and store, 130 feet west of, 15 feet south of main mail road, in line with road north to Sparta, 4 feet west of tele- phone pole; iron post stamped "Prim. Trav. Sta. No. 42, 1916".	37	55	33.3	77	13	52.0	5,784
Private road east.....	37	55	25.6	77	13	23.0	2,451
T road northeast.....	37	55	03.9	77	12	50.7	3,392
Gether post office.....	37	54	59.7	77	12	24.3	2,162

Along highway north-south through center of quadrangle.

Prim. Trav. Sta. No. 34, at Newtown.....	37	54	48.8	77	07	41.4	.....
Road fork.....	37	54	01.4	77	08	01.0	5,039
T road northeast.....	37	52	51.2	77	08	39.5	7,744
T road northeast.....	37	52	21.4	77	08	10.1	3,828
Ford of small creek.....	37	52	16.4	77	08	04.6	676
Road forks, T road east.....	37	51	56.8	77	07	48.4	2,366
T road easterly.....	37	51	02.4	77	07	26.3	5,787
T road north.....	37	50	29.2	77	07	11.9	3,547
Center of bridge over creek.....	37	50	08.1	77	07	04.4	2,215
T road northeasterly.....	37	49	46.6	77	06	33.9	3,273
T road northeast and farm road southwest.....	37	49	20.9	77	06	08.2	3,323
T road east to Biscoe.....	37	49	01.1	77	05	53.5	2,324
Mattaponi River, center of bridge truss over line between King and Queen County and King William County.....	37	48	48.8	77	05	58.2	1,298
Beulahville, 5.3 miles southeast of, 1.25 miles west of bridge across Mattaponi River, about 75 feet north and 50 feet east of T road corners, road southeast to Aylett and northwest to Beulahville, 25 feet east of road to Dunkirk Landing, just inside wire-fence line, 8 feet south of cedar tree; iron post stamped "Prim. Trav. Sta. No. 43, 1916".	37	48	06.9	77	06	57.5	6,377
Center of concrete bridge over creek.....	37	48	35.9	77	07	31.0	3,983
Road forks.....	37	48	41.7	77	07	47.1	1,418
Road forks, second-class wood road.....	37	49	50.4	77	08	55.8	8,880
Private road east.....	37	50	25.3	77	09	17.5	3,932
Road forks, T road southwest.....	37	50	33.6	77	09	27.1	1,131
Road forks, road northeast.....	37	50	51.1	77	09	49.3	2,514
Beulahville, crossroads at.....	37	51	19.0	77	10	44.8	5,275
T road north.....	37	52	05.6	77	11	52.8	7,205
Carlton store, T road southwest at.....	37	52	20.0	77	12	08.8	1,937
T road corners.....	37	52	46.9	77	13	13.5	5,865

Magnetic declination near north border of quadrangle, 5° 20' W.; near center of quadrangle, 5° 18' W.; in southwest quarter of quadrangle, 5° 00' W.

Along highways in northeast quarter of quadrangle.

Lloyds post office, about 0.75 mile southeast of, 200 feet N. 64° W. from northwest corner of Essex Church, in line with road west and close to forks of road; iron post stamped "Prim. Trav. Sta. No. 26, 1916".	37	59	28.8	77	00	17.8	.....
Banks post office (discontinued), about 400 feet northeast from Lovings, at line between Essex and Caroline counties.....	37	59	39.2	77	04	20.7	.....
T road east at store.....	37	58	29.2	77	04	12.4	7,108
Beazley's, T road west, 125 feet north of store.....	37	57	53.7	77	04	13.6	3,598
T road north.....	37	57	34.3	77	02	53.8	6,686
Road forks, 7 feet southeast of pine tree.....	37	57	16.7	77	02	19.7	3,254
Road forks, road south.....	37	56	52.2	77	01	44.3	3,766
Crossroads, second-class roads north and south.....	37	56	47.3	77	01	05.9	3,119
Private road southwest.....	37	56	47.6	77	00	29.5	2,911

Magnetic declination for northeast quarter of quadrangle, 4° 50' W.

BEAVER DAM QUADRANGLE.

South along highways near east border of south half of quadrangle. (By E. L. McNair in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Little River, center of wooden bridge over.....	37 50 44.7	77 30 21.7	.....
Road forks.....	37 50 21.9	77 30 59.8	3,828
T road south and a little west.....	37 50 02.9	77 30 36.7	2,672
New Found River, ford.....	37 49 19.7	77 30 44.7	4,413
Road west.....	37 48 50.6	77 30 41.1	2,954
South Anna River, bridge over, center of wooden span on.....	37 48 12.0	77 30 31.2	3,988
Road forks.....	37 47 42.2	77 30 15.1	3,276
Crossroads.....	37 47 27.4	77 30 12.1	1,518
T road southwest.....	37 46 51.7	77 30 31.9	3,948

Magnetic declination for east border of south half of quadrangle, 5° 00' W.

BERMUDA HUNDRED QUADRANGLE.

Near east border of quadrangle. (By E. L. McNair in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Malvern Hill post office, 2 miles northwest of, river road at road northeast to Elko, at northwest corner; iron post stamped "Prim. Trav. Sta. No. 56, 1916".....	37 24 20.2	71 15 58.4	.....

Magnetic declination for east border of quadrangle, 4° 13' W.

BOWLING GREEN QUADRANGLE.

East along highways near south border of quadrangle (spur line). (By E. L. McNair in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Crossroads, second class.....	38 00 01.1	77 25 53.8	.....

East along highways near south border of quadrangle (main circuit).

T road east, second class.....	38 00 07.0	77 24 57.6	.....
T road north.....	38 00 52.5	77 24 44.2	4,724
Road forks, 85 feet westerly from schoolhouse.....	38 00 49.9	77 23 22.9	6,511
Road forks.....	38 00 57.0	77 23 03.5	1,715
Mattaponi River, center of concrete bridge over.....	38 01 08.0	77 22 38.6	2,284
Milford, on main line of Richmond, Fredericksburg & Potomac R. R., road crossing; center of tracks.....	38 01 21.0	77 22 28.7	1,531
Road forks.....	38 00 57.2	77 21 16.4	6,262
Bowling Green, 2 miles south of, 20 feet from road and in line with road southwest, location of old Antioch Church, 10 feet north of driveway to house on east side of road; iron post stamped "Prim. Trav. Sta. No. 39, 1916".....	38 01 04.0	77 20 17.9	4,739
Road forks.....	38 00 17.6	77 19 52.1	5,130

Magnetic declination near south border of quadrangle, 5° 15' W.

BOYKINS QUADRANGLE.

Southwest along highways near east border of quadrangle. (By J. J. Phelan in 1918.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Center of small culvert crossing road, about 168 feet south of G. W. Thomas's mail box, on west edge of road.....	36	36	42.2	77	00	19.3	.....
Center of small bridge over drainage ditch.....	36	35	56.2	77	00	42.0	5,007
Sunbeam, southeast corner of crossroads, 10 feet from corner fence post diagonally opposite Drake's store.....	36	35	16.4	77	01	41.7	6,317

South along highways near east border of quadrangle.

Story, middle of railroad crossing, south rail, marked by nail driven in plank.....	36	42	17.4	77	00	42.1	.....
Center of road, at north end of bridge.....	36	41	24.6	77	01	02.7	5,594
T road, center of.....	36	41	16.2	77	01	16.9	1,438
T road, center of Franklin-Courtland road, 28 feet east of east end of bridge.....	36	40	59.3	77	00	50.9	2,726
T road northwest.....	36	40	04.1	77	00	36.0	5,715
T road east, 7 feet from fence and 15 feet southwest of mail box 62.	36	39	29.5	77	00	18.0	3,796

North along highways and railway.

Southwest angle of triangle where three roads meet, near C. Holland's house.....	36	33	07.4	77	01	22.7	.....
Beaman's Creek, south side of river, east edge of road at flour mill, 14 feet from dam gate.....	36	33	11.7	77	01	08.2	1,262
West side of wheel track, 36 feet northwest of T. H. Edson's mail box.....	36	33	53.2	77	01	08.7	4,192
T road southeast, center line of road east and west.....	36	34	38.9	77	01	15.2	4,655
Sunbeam, in front of A. Storey's house, center of road.....	36	34	53.3	77	01	22.9	1,587
Sunbeam, about 1,000 feet northwest of school, crossroads at store.....	36	35	16.6	77	01	42.0	2,823
Sunbeam, 90 feet southeast of church door, T road southwest.....	36	35	36.5	77	01	58.2	2,408
Center of small culvert, 382 feet south of R. B. Gray's house.....	36	36	36.0	77	02	36.1	6,771
Handsom, 2 miles west of, in front of church, center of crossroads.....	36	37	00.0	77	02	46.0	2,550
T road west, about 8 feet from a point 10 feet south of J. T. Barrett's mail box.....	36	37	57.7	77	02	59.6	5,946
Road crossing, over fourth cross tie from first rail joint west of, north rail of Seaboard Air Line Ry.....	36	38	29.4	77	03	11.2	3,338
Milepost 44, north track opposite.....	36	38	32.3	77	02	12.0	4,831
Hand station, about 30 feet southwest of corner of depot, in corner of field; iron post stamped "Prim. Trav. Sta. No. 9P, 1918".....	36	38	32.7	77	01	50.5	1,753
Milepost 43, north rail opposite.....	36	38	38.7	77	01	08.0	3,514
Delaware, 0.5 mile west of, west end of second bridge west of, north rail.....	36	38	43.6	77	00	51.4	1,443
Delaware, west end of bridge over Nottoway River.....	36	38	54.3	77	00	15.3	3,138
Milepost 42, north rail opposite.....	36	38	56.7	77	00	07.3	697

Magnetic declination near east border of quadrangle, 4.5° W.

Southeast along Seaboard Air Line Ry. (By H. J. Switzer in 1918.)

Prim. Trav. Sta. No. 5, 1918 (previously listed).....	36	34	13.5	77	14	57.4	.....
Stone culvert.....	36	34	25.3	77	14	30.7	2,480
Road crossing, south rail.....	36	34	34.4	77	13	57.2	2,884
Farm-road crossing, south rail.....	36	34	43.9	77	13	18.3	3,315
Boykins, 50 feet south of south rail of Seaboard Air Line Ry., 30 feet north of north rail of Roanoke & Tar River Branch, west of road crossing; iron post stamped "Prim. Trav. Sta. No. 14, 1918". Azimuth to top of steeple, 279° 57' 10".....	36	34	59.6	77	12	11.9	5,644
Road crossing, west rail.....	36	34	07.1	77	12	09.7	5,307
Farm-road crossing, west rail.....	36	33	38.1	77	12	04.8	2,964
State-line post, west rail opposite.....	36	32	43.2	77	11	55.6	5,596

BOYKINS QUADRANGLE—Continued.

East along Southern Ry. in north part of quadrangle. (By J. J. Phelan in 1917.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	
West end of bridge 56.2.....	36	43	05.7	77	14	39.0	<i>Fect.</i>
Road crossing at water tank, 800 feet east of milepost 56.....	36	43	01.7	77	14	12.2	2,222
West end of bridge, south rail.....	36	42	59.1	77	13	43.3	2,363
Milepost 55, north rail.....	36	42	53.4	77	13	21.8	1,842
Capron, 0.5 mile west of, at west end of bridge, south rail.....	36	42	45.0	77	12	39.3	3,566
Milepost 54, south rail.....	36	42	39.9	77	12	19.8	1,672
Capron, center of road crossing, south rail.....	36	42	40.5	77	12	00.8	1,548
Milepost 53, south rail.....	36	42	49.4	77	11	16.4	3,726
Milepost 52, south rail.....	36	43	11.8	77	10	18.9	5,200
Pope, road crossing, south rail at center line.....	36	43	10.2	77	10	02.0	1,386
Pope, 0.25 mile east of, north rail at west end of bridge.....	36	43	04.7	77	09	40.5	1,831
Pope, 0.875 mile east of, 730 feet east of milepost 51, road crossing on main county road.....	36	42	58.9	77	09	07.2	2,777
Pope, 1 mile east of, west end of bridge.....	36	42	55.7	77	08	47.3	1,651
Milepost 50, south rail.....	36	42	51.5	77	08	12.1	2,896
West end of bridge 49.3.....	36	42	53.4	77	07	25.5	3,804
Milepost 49, south rail.....	36	42	54.6	77	07	07.4	1,471
North end of bridge 48.4.....	36	42	56.7	77	06	30.8	2,987
Milepost 48, south rail.....	36	42	57.7	77	06	02.7	2,293
West end of bridge 47.6.....	36	42	58.5	77	05	39.4	1,895
Road crossing, 200 feet east of milepost 47.....	36	42	59.9	77	04	55.4	3,589
West end of long bridge over Nottoway River into Courtland.....	36	43	00.4	77	04	39.9	1,264
Courtland, west end of station.....	36	43	04.3	77	04	07.9	2,633
Courtland, 3.3 feet west of first rail joint east of road crossing at milepost 46, south rail.....	36	43	05.1	77	03	53.8	1,148
Courtland, 0.75 mile east of, center of road crossing.....	36	42	57.6	77	03	23.6	2,568
Milepost 45, south rail.....	36	42	49.7	77	02	51.7	2,725
Road crossing, near milepost 44.....	36	42	35.6	77	01	55.2	4,812
Milepost 43, south rail.....	36	42	18.8	77	00	47.8	5,748
Story, road crossing.....	36	42	17.4	77	00	42.1	482
Story, southwest corner of road crossing and Southern Ry. crossing, near corner of wire fence; iron post stamped "Prim. Trav. Sta. No. 11F, 1918".....	36	42	17.3	77	00	42.4	28

Southwest along highways in northeast corner of quadrangle.

T road northeast near K. Sykes's mail box 37, outer edge of road southeast and center line of T road.....	36	44	12.6	77	02	11.4	.....
Center of crossroads, 16 feet west of tree with sign "2 miles to W. T. Davis's Grocery".....	36	44	17.9	77	02	22.5	1,050
Center of road, opposite Patton's paint sign "1 mile to Court- land".....	36	43	28.9	77	03	16.9	6,642
T road north, 6 feet from fence on road northeast and southwest.....	36	43	25.2	77	03	22.9	612
Courtland, road crossing.....	36	43	05.1	77	03	53.8	3,235

Mean magnetic declination for southeast corner of quadrangle, 4.1° W.

South near west border of quadrangle. (By J. J. Phelan in 1918.)

T road west.....	36	42	14.1	77	12	19.2	.....
Center of culvert.....	36	41	43.4	77	12	55.2	4,270
West edge of road, in line with center of T road east, 28 feet from C. B. Smith's mail box.....	36	41	15.3	77	13	14.8	3,258
T road west at mail box No. 8.....	36	40	46.6	77	13	36.8	3,414
Angle of road forks, 18 feet from center of road to northeast and 30 feet from center of road to northwest.....	36	40	30.6	77	14	09.3	3,105
Road forks, on north edge of road to north and east, 10 feet from center of culvert.....	36	40	18.1	77	14	16.1	1,380
East edge of road, 45 feet south of T road east and 500 feet north of John Johnson's residence.....	36	39	50.4	77	13	43.3	3,873
Road forks, on west edge of north and south road at, 75 feet south of E. L. Sommon's mail box, No. 15.....	36	39	33.7	77	13	41.2	1,705
Boykins, about 5.5 miles north of, on west side of road, in front of A. L. Drewey's residence, 28 feet south of mail box; iron post stamped "Prim. Trav. Sta. No. 12P, 1918".....	36	38	47.6	77	12	57.8	5,860
Milepost "Boykins 5", on east side of road, 26 feet north of.....	36	38	29.4	77	12	45.5	2,091
East edge of road, 4 feet from southeast corner of small bridge.....	36	38	01.2	77	12	32.8	3,039
Milepost "Boykins 4".....	36	37	42.5	77	12	31.1	1,893
Road forks at milepost "Boykins 3".....	36	36	55.9	77	12	35.4	4,730
T road north, at Marthie J. Banks's mail box, No. 6.....	36	36	34.8	77	12	20.6	2,460

BOYKINS QUADRANGLE—Continued.

East through center of quadrangle along Seaboard Air Line Ry.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Boykins, opposite depot, 2 feet west of north rail.....	36	35	04.5	77	12	01.0	.....
Boykins, about 0.75 mile north of, center of railroad crossing....	36	35	27.9	77	11	26.1	3,698
Milepost 53, north rail in front of.....	36	35	42.4	77	11	04.8	2,274
Milepost 52, north rail in front of.....	36	36	04.3	77	10	06.2	5,267
Railroad crossing, center of, north rail.....	36	36	21.3	77	09	35.6	3,025
Milepost 51, north rail in front of.....	36	36	34.3	77	09	13.2	2,252
Milepost 50, north rail in front of.....	36	37	04.7	77	08	20.6	5,276
Newsoms, 0.5 miles south of, center of railroad crossing, north rail.	36	37	21.2	77	07	51.5	2,903
Newsoms, in front of milepost 49, north rail.....	36	37	31.7	77	07	25.5	2,371
Railroad crossing, center of, north rail.....	36	37	48.2	77	06	16.6	5,859
Milepost 47, north rail in front of.....	36	38	01.1	77	05	21.3	4,695
Cum post office, railroad crossing at, north rail.....	36	38	06.4	77	04	58.8	1,905
Milepost 46, north rail in front of.....	36	38	15.7	77	04	19.1	3,369
Milepost 45, north rail in front of.....	36	38	28.8	77	03	16.6	5,266
Handsom post office, railroad crossing at.....	36	38	29.4	77	03	11.2	445

From Newsoms northwest and southwest along highways to Boykins.

Newsoms, 0.25 mile north of, road forks to west.....	36	37	34.0	77	07	36.3	.....
Road forks east.....	36	37	58.2	77	07	56.5	2,792
Small bridge, south end of.....	36	38	00.1	77	08	13.2	1,422
T road east, near A. J. Harris's mail box.....	36	38	33.9	77	08	41.8	4,135
Bridge, south end of.....	36	38	50.6	77	08	42.3	1,698
T road south.....	36	39	23.0	77	09	19.2	4,451
Prim. Trav. Sta. No. 14.....	36	34	59.6	77	12	11.9	.....
Boykins, first wooden bridge north of, on road to Courtland, north end of.....	36	35	16.6	77	12	02.1	1,898
Road forks, at top of hill.....	36	35	30.4	77	11	56.4	1,477
Right-angle turn in road near milepost 1.....	36	35	41.9	77	11	32.1	2,300
Milepost 2.....	36	36	27.9	77	11	55.4	5,014
Road forks, front of church.....	36	36	35.3	77	12	00.4	855
Milepost 3.....	36	37	00.2	77	11	28.0	3,643
Milepost 4.....	36	37	46.9	77	10	50.2	5,640
Milepost 5.....	36	38	30.5	77	10	20.1	5,051
Road north into woods, 75 feet east of, edge of road, near field, 12 feet west of large cedar tree.....	36	38	53.0	77	10	05.7	2,558
Road forks, at J. H. Pope's mail box, No. 18.....	36	39	00.7	77	09	57.3	1,035

Magnetic declination for south border of quadrangle, 4° 14' W.; for west border of quadrangle, 4° 02' W.; for center of quadrangle, 4° 16' W.

CAMP ABRAHAM EUSTIS.

For positions see Yorktown quadrangle, pages 499 to 501.

CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN, AND WASHINGTON QUADRANGLES.

From Mount Vernon flag pole northeast to Dunn triangulation station. (By School of Topography, U. S. Army, in 1918).

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Mount Vernon flag pole (U. S. Coast and Geodetic Survey).....	38	42	27.17	77	05	10.62	.....
Mount Vernon electric station, about 1.5 miles northwest of, on top of north end of end wall of concrete culvert; chiseled square Gum Springs, about 70 feet northeast of fork of Washington and Richmond Highway and Mount Vernon Boulevard, on south end of concrete watering trough; bronze tablet of U. S. Army.	38	43	57.17	77	05	33.93	9,295
Gum Springs, 0.5 mile northeast of, at road forks, opposite Olivet Church.....	38	44	20.86	77	05	20.09	2,636
T road, 0.2 mile northeast of Olivet Church.....	38	44	36.06	77	04	53.17	2,630
Gate, west side of Alexandria road, near top of hill.....	38	44	35.51	77	04	37.88	1,212
Dunn triangulation station of the U. S. Coast and Geodetic Survey on farm of John T. Dunn, on a very high point about halfway between Alexandria and Mount Vernon, near center of small lot just south of farmhouse. It is best reached by wagon by the River Road from Alexandria. Station marks: Underground mark is a 3-inch terra-cotta pipe, set in cement, the top of which is about 15 inches below surface of ground; surface mark is a short piece of 4-inch terra-cotta pipe, set in cement, level with surface of ground.....	38	44	54.77	77	03	47.00	4,480
	38	45	12.54	77	03	54.79	1,888

**CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN,
AND WASHINGTON QUADRANGLES—Continued.**

From Mount Vernon flag pole to Gunston Hall.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Mount Vernon flag pole (U. S. Coast and Geodetic Survey station).....	38 42 27.17	77 05 10.64	.....
Mount Vernon station, 0.1 mile northwest of, center of concrete bridge carrying electric railroad over highway.....	38 42 40.74	77 05 15.83	1,438
Mount Vernon station, 0.6 mile northwest of, crossroads, at northwest corner of concrete culvert; chiseled square.....	38 43 01.29	77 05 46.63	3,208
T road opposite west gate to Mount Vernon estate.....	38 42 46.94	77 05 48.67	1,460
T road south.....	38 42 57.85	77 06 33.82	3,747
Road forks, 0.3 mile south of Washington and Richmond Highway.....	38 43 05.75	77 07 06.22	2,690
Center of concrete bridge on Washington and Richmond Highway, 0.12 mile southwest to T road south.....	38 43 19.69	77 07 20.00	1,784
T road (lane) north.....	38 43 13.40	77 07 32.83	1,201
Crossroads, 0.25 mile southeast of, about 750 feet southwest of Woodlawn Mansion; bronze tablet.....	38 42 52.79	77 08 20.77	.....
T road north, about 300 feet west of, at Woodlawn Church.....	38 42 48.51	77 08 27.56	.....
Intersection of Washington and Richmond Highway and cement road leading into Camp Humphreys.....	38 42 40.52	77 08 37.10	1,107
Trestle 5, Camp A. A. Humphreys R. R., center of road.....	38 42 31.86	77 09 19.32	3,461
Accotink village, at T roads, east end of south wall of concrete culvert; bronze tablet of U. S. Army.....	38 42 30.93	77 09 33.79	1,151
Accotink Creek, east end of steel bridge over, on Washington and Richmond Highway.....	38 42 17.69	77 09 57.27	2,296
Road forks, one leads south to Pohick Bay.....	38 41 54.31	77 10 16.16	2,799
Fork of Washington and Richmond Highway and Lewis Chapel road, about 1 mile southeast of Pohick Church.....	38 42 03.11	77 10 46.03	2,532
Crossroads, 0.6 mile south of Pohick Church, near rifle range headquarters.....	38 42 05.61	77 11 49.40	5,033
Pohick Creek, south end of steel highway bridge over.....	38 41 53.34	77 12 05.89	1,804
Road fork, 0.5 mile southwest of Pohick Creek highway bridge.....	38 41 33.01	77 12 21.17	2,388
Lewis Chapel crossroads, about 50 feet southwest of, on concrete well platform; bronze tablet of U. S. Army.....	38 41 13.94	77 12 31.73	2,103
Road forks, 0.3 mile south of Lewis Chapel.....	38 40 58.02	77 12 32.11	1,611
Lebanon School, center of road opposite.....	38 40 41.65	77 12 09.93	2,415
T road northeast (private road).....	38 40 20.21	77 11 34.84	3,528
Road forks, 1 mile southeast of Lebanon School.....	38 40 07.43	77 11 13.97	2,099
T in road.....	38 40 17.65	77 10 49.60	2,192
Road forks, left-hand road leads to Gunston Hall; hub at station 83.....	38 40 04.67	77 10 11.21	3,316
Road fork, 0.2 mile northwest of Gunston Hall, on north end of concrete culvert; chiseled square.....	38 39 57.89	77 09 47.90	1,971
Gunston Hall, square tower (U. S. Coast and Geodetic Survey position).....	38 39 50.60	77 09 37.52	1,105

NOTE.—The tower on Gunston Hall has been removed; point tied to was the approximate center of house.

From point 1 mile southeast of Pohick Church via Washington and Richmond Highway and Richmond, Fredericksburg & Potomac R. R. to Accotink station.

Fork of Washington and Richmond Highway and Lewis Chapel road, about 1 mile southeast of Pohick Church.....	38 42 03.11	77 10 46.03	.....
Pohick Church, about 200 feet east of; 25 feet north of intersection of crossroads, in edge of field; concrete post, bronze tablet.....	38 42 33.02	77 11 36.06	.....
Road forks, 0.2 mile northwest of Pohick Church.....	38 42 36.25	77 11 50.36	1,183
Pohick Creek, east end of Washington and Richmond Highway steel bridge.....	38 42 12.96	77 12 51.23	5,369
Lorton station, about 600 feet north of, in east side of south abutment of Richmond, Fredericksburg & Potomac R. R. bridge over Washington and Richmond Highway; bronze tablet of U. S. Army.....	38 42 20.04	77 13 16.44	2,120
Pohick Creek, about 10 feet from south end of Richmond, Fredericksburg & Potomac R. R. bridge, on center line of southbound track.....	38 42 45.58	77 13 04.07	2,750
Pohick station, opposite, center of southbound track.....	38 43 09.85	77 12 35.96	3,314
Accotink Creek, center of Richmond, Fredericksburg & Potomac R. R. bridge, on southbound track.....	38 43 22.42	77 12 15.72	2,047
Center of northbound track, at road crossing.....	38 43 37.77	77 11 36.16	3,500
Richmond, Fredericksburg & Potomac R. R. northbound track, opposite tangent on Camp A. A. Humphreys R. R.....	38 44 06.12	77 11 12.90	3,408
Accotink station, opposite operator's window, center of northbound track.....	38 44 16.95	77 11 09.81	1,120
Accotink station, about 300 feet north of, south end of Richmond, Fredericksburg & Potomac R. R. trestle; bronze tablet of U. S. Army.....	38 44 19.46	77 11 09.00	260

CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN, AND WASHINGTON QUADRANGLES—Continued.**From Pohick Church via highway to Potters Hill crossroads.**

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	
Pohick Church crossroads.....	38	42	32.72	77	11	36.10	Feet.
Pohick Church, 0.5 mile north of, in front of F. Nevitt's residence, in root of cedar tree; nail.....	38	42	58.92	77	11	40.62	2,676
Accotink Creek, center of steel highway bridge.....	38	43	13.73	77	11	27.98	1,803
Center of Camp A. A. Humphreys R. R. crossing.....	38	43	30.49	77	10	57.60	2,947
Crossroads, at top of hill.....	38	43	49.58	77	10	29.74	2,962
T road, road to west leading to Accotink station.....	38	43	59.43	77	10	17.28	1,376
Center of highway over concrete culvert.....	38	44	17.31	77	10	03.66	2,109
Potters Hill crossroads, four corners, Hawkins Prim. Trav. Sta. (See Bull. 551, p. 327).....	38	44	28.80	77	09	42.30	2,055

From Potters Hill crossroads to Accotink Village.

Potters Hill crossroads (described above).....	38	44	28.80	77	09	42.30	.....
Road forks, 0.45 mile south of Potters Hill School.....	38	44	07.88	77	09	39.00	2,136
T road west.....	38	43	48.50	77	09	40.68	1,962
T road west.....	38	43	18.86	77	09	35.59	3,023
Trestle 4, on Camp A. A. Humphreys R. R., about 100 feet north of small creek.....	38	42	49.56	77	09	35.06	2,971
Accotink village, east end of south wall of concrete culvert; chiseled square.....	38	42	30.93	77	09	33.79	1,876

From Potters Hill crossroads via Woodlawn Road to Washington and Richmond highway.

Potters Hill crossroads (described above).....	38	44	28.80	77	09	42.30	.....
Woodlawn road, at angle.....	38	43	56.72	77	09	21.53	3,657
Road forks.....	38	43	48.31	77	09	02.24	1,755
Center of wooden culvert across road to spring.....	38	43	30.49	77	08	50.03	2,052
Crossroads at church.....	38	43	12.60	77	08	40.47	1,967
T road north, about 300 feet west of Woodlawn Church, on Washington and Richmond Highway.....	38	42	48.51	77	08	27.56	.....

From Washington and Richmond Highway south along Belvoir Peninsula to old Fairfax Landing.

T road north, about 300 feet west of Woodlawn Church, on Washington and Richmond Highway.....	38	42	48.51	77	08	27.56	.....
Camp Humphreys, north end of base line of camp coordinate system.....	38	42	37.25	77	08	50.66	.....
Camp Humphreys, at north edge of east and west concrete road along north side of north section; iron bolt.....	38	41	37.01	77	08	19.51	6,577
Camp Humphreys, steel water tower, in concrete base of feed pipe; bronze tablet (Spur line. This point is unchecked.).....	38	41	35.18	77	08	30.01	853
Camp Humphreys, at north edge of east and west concrete road along north side of north section; iron bolt.....	38	41	37.01	77	08	19.51	853
Camp Humphreys, north edge of east and west road along south side of H section; hub.....	38	41	09.49	77	08	05.34	3,005
Camp Humphreys, approximately on base line, in oak stump; nail.....	38	40	51.34	77	07	55.73	1,990
Camp Humphreys, south end of base line of camp coordinate system (station .0+00).....	38	40	37.90	77	07	48.88	1,466
Intersection of road to Belvoir Dock and road to upper (new) dock.....	38	40	53.07	77	07	46.10	1,549
Forks of road to Belvoir Dock and old road to old watch house, at Fairfax Landing.....	38	41	03.30	77	07	49.57	1,069
White house, the farther south of two, chimney of (U. S. C. & G. S. position).....	38	41	00.86	77	07	28.34	1,703

From Accotink station along highways southeast to Accotink village.

Richmond, Fredericksburg & Potomac Ry. track, 1,120 feet south of Accotink station, opposite tangent on Camp A. A. Humphreys R. R.....	38	44	06.12	77	11	12.90	.....
Crossroads, 0.2 mile southeast of Accotink station.....	38	44	04.69	77	11	03.58	750
Road forks.....	38	44	00.10	77	10	30.89	2,630
Top of hill, west side of road, in stump; nail, painted "P. T. Pt. No. 1".....	38	43	35.22	77	10	29.63	2,515
Camp A. A. Humphreys R. R., 100 feet southeast of crossing, in front of W. T. Jones's residence, in root of oak tree, painted "U. S. A. 71.3 B. M.," copper nail.....	38	43	12.30	77	10	13.59	2,641
Center of road, over concrete culvert.....	38	42	46.57	77	09	36.94	3,896
Accotink village, at T roads, east end of south wall of concrete culvert; chiseled square.....	38	42	30.93	77	09	33.79	1,599

**CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN,
AND WASHINGTON QUADRANGLES—Continued.**

**From U. S. Geological Survey point Hawkins near Accotink station, on Southern Ry., to junction
of telegraph and gravel roads. (By School of Topography, U. S. Army, in 1918.)**

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Grade crossing.....	38	44	18.08	77	11	09.49	.....
Second-class road crossing.....	38	45	16.83	77	10	42.07	6,330
Crossing of culvert and railroad.....	38	46	07.64	77	09	48.28	6,599
Franconia station, second-class road crossing.....	38	46	56.9	77	09	23.07	5,464
T road at church.....	38	46	55.88	77	08	46.62	2,888
Concrete culvert, center line.....	38	47	02.75	77	07	55.63	4,097
Prim. Trav. Sta. No. 3, in concrete culvert, at side of road.....	38	47	10.63	77	07	20.30	2,910
Intersection of T road and telegraph road.....	38	46	28.51	77	06	41.76	5,240
Concrete culvert, bench mark 970.....	38	46	11.49	77	07	06.97	2,641
Prim. Trav. Sta. No. 5, in concrete culvert, at side of road, near intersection of telegraph and gravel roads; chiseled square.....	38	46	02.35	77	07	17.25	1,225

**From Potters Hill crossroads, U. S. Geological Survey point Hawkins, to junction of telegraph
and gravel roads.**

Four corners, 100 feet southeast to schoolhouse, 220 feet west to house (U. S. G. S. point Bull. 551, p. 327).....	38	44	28.8	77	09	42.3	.....
Road to right to gravel pit.....	38	44	33.63	77	09	27.77	1,250
Concrete bridge, center line.....	38	44	38.37	77	09	02.67	2,047
Concrete bridge.....	38	44	53.67	77	08	37.40	2,529
Concrete culvert, center of, in front of tenant house belonging to Hayfield mansion.....	38	45	03.48	77	08	27.10	1,285
Road left to gravel pit.....	38	45	13.72	77	08	18.95	1,221
Prim. Trav. Sta. No. 4, nail in concrete culvert, 750 feet north of Hayfield mansion.....	38	45	23.34	77	08	14.34	1,040
Right-hand side of road, 693.5 feet from concrete culvert; nail in root of cedar tree.....	38	45	29.13	77	08	09.64	693
Wood culvert.....	38	45	42.68	77	07	53.58	1,871

From intersection of telegraph and gravel roads (Prim. Trav. Sta. No. 5) to Gum Springs.

Prim. Trav. Sta. No. 6, 6 feet from oak tree which is bench mark 48.9.....	38	45	41.48	77	06	23.94	4,718
Wooden bridge.....	38	45	37.41	77	05	46.08	3,028
Prim. Trav. Sta. No. 7, chiseled square on concrete culvert, at T road west, 1.2 miles from Gum Springs Church.....	38	45	33.36	77	05	08.62	2,993
Concrete culvert.....	38	45	04.76	77	05	04.70	2,907
Nail in oak stump, on left-hand side of road, between tele- graph posts 188 and 189, 30 feet from 189.....	38	44	40.62	77	04	50.80	2,671
Gum Springs, at junction of concrete road and Richmond and Washington Highway, near colored church; nail.....	38	44	36.47	77	04	52.95	448
Gum Springs, Prim. Trav. Sta. No. 2, 70 feet northeast of road forks.....	38	44	20.86	77	05	20.09	2,672

No magnetic declination.

**From Mount Vernon to Hunter via Washington-Virginia Ry. (electric) and from Hunter to Fort
Hunt via highway. (By H. S. Senseasy in 1920.)**

Mount Vernon flag pole, U. S. Coast and Geodetic Survey triangulation station.....	38	42	27.17	77	05	10.64	.....
Second-class road crossing, 2 feet west of telephone pole, at northwest corner of crossing; copper nail in hub, marked "P. T. 1 S.".....	38	42	55.54	77	05	06.40	2,890
Miller, center of track, in front of station, copper nail in tie, marked "P. T. 2 S.".....	38	43	02.59	77	04	40.73	2,155
Riverside, center of track in front of station; copper nail in tie, marked "P. T. 3 S.".....	38	43	08.89	77	04	26.87	1,269
Second-class road crossing, center of track; copper nail, marked "P. T. 4 S.".....	38	43	12.31	77	04	19.33	691
Hunter, center of road crossing; copper nail, marked "P. T. 5 S.".....	38	43	22.02	77	03	53.38	2,279
T road west, in southwest corner, in root of cedar tree; copper nail, marked "P. T. 36 S.".....	38	43	19.11	77	03	39.81	1,115
Fort Hunt, on north side of road, at entrance, southwest corner of base of gate post; chiseled square, marked "P. T. 37 S.".....	38	43	07.30	77	03	27.79	1,529
Fort Hunt, flag pole, U. S. Coast and Geodetic Survey triangu- lation station.....	38	42	56.46	77	03	06.59	2,006

CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN,
AND WASHINGTON QUADRANGLES—Continued.

From Hunter to New Alexandria via Washington-Virginia Ry. (electric).

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Hunter, "Prim. Trav. Sta. 5 S." (previously described).....	38 43 22.02	77 03 53.38	.....
North Mount Vernon, 98 feet west of road crossing, 15 feet south of center of track, 17 feet north of center of road; copper nail in hub, marked "P. T. 6 S." (Prim. Trav. Sta. No. 1 to be set here).....	38 43 29.71	77 03 35.63	1,608
Grassymead, in front of station, center of track, marked "P. T. 7 S.".....	38 43 39.10	77 03 19.05	1,621
Snowdons, 30 feet south of road crossing, in east end of tie; copper nail, marked "P. T. 8 S.".....	38 43 55.94	77 02 53.35	2,656
Herbert Springs, center of track, at road crossing; copper nail, marked "P. T. 9 S.".....	38 44 07.04	77 02 48.77	1,180
Arcturus, center of track, in front of station; copper nail, marked "P. T. 10 S.".....	38 44 14.41	77 02 48.98	747
Wellington, center of track, at road crossing; copper nail, marked "P. T. 11 S.".....	38 44 25.68	77 02 51.54	1,158
Wellington Villa, center of track, at road crossing; copper nail marked "P. T. 12 S.".....	38 44 48.20	77 02 56.69	2,315
Aled, center of track, in front of station; copper nail, marked "P. T. 13 S.".....	38 44 55.41	77 02 58.33	740
Warwick, 34 feet south of southeast corner of station, 23 feet west of west rail; copper nail in hub, marked "P. T. 14 S." (Prim. Trav. Sta. No. 2 to be set here).....	38 45 06.64	77 03 01.20	1,160
Dyke, center of track, in front of station; copper nail, marked "P. T. 24 S.".....	38 45 33.44	77 02 57.80	2,724
New Alexandria, at south end of tangent south of, center of track, between trolley poles; copper nail, marked "P. T. 25 S.".....	38 46 15.00	77 03 28.20	4,846
New Alexandria, 40 feet south and 36 feet east of road crossing, 6 feet west of poplar tree; copper nail in hub, marked "P. T. 26 S." (Prim. Trav. Sta. No. 3 to be set here).....	38 46 49.50	77 03 23.48	3,510
West edge of road, 34 feet south of concrete culvert; copper nail, marked "P. T. 27 S.".....	38 46 47.61	77 03 47.41	1,905
Road forks, on south edge of concrete road, 31 feet east of tele- phone pole; marked "P. T. 23 S.".....	38 47 28.56	77 03 38.32	4,204

From Gum Springs to New Alexandria via highway.

Gum Springs, 70 feet northeast of fork of Washington and Rich- mond Highway and Mount Vernon Boulevard, south end of watering trough; chiseled square.....	38 44 20.86	77 05 20.09	.....
Gum Springs Church, 35 feet northeast of, in root of oak tree; copper nail, marked "P. T. 18 S.".....	38 44 37.50	77 04 52.58	2,753
Front of red barn, west side of road, in root of big oak tree; copper nail, marked "P. T. 19 S.".....	38 45 15.50	77 05 11.60	4,128
T road west, east end of culvert, at northwest corner; bronze tablet, stamped "P. T. 23 S.".....	38 45 33.22	77 05 08.60	1,808
East edge of concrete road, at two mail boxes; chiseled square, marked "P. T. 15 S.".....	38 45 47.22	77 05 04.09	1,463
Crossroads, in southwest corner, 1 foot east of telephone pole, in hub; copper nail, marked "P. T. 16 S.".....	38 45 57.08	77 05 03.22	998
Telephone pole 115, west edge of concrete road; chiseled square, marked "P. T. 17 S.".....	38 46 20.84	77 04 53.68	2,520
Crossroads, at southwest corner, at base of telephone pole, in hub; copper nail, marked "P. T. 21 S.".....	38 46 52.66	77 04 45.42	3,284
Telephone pole 64, 24 feet south of, 2 feet west of west edge of con- crete road; copper nail, marked "P. T. 22 S.".....	38 47 15.60	77 04 01.80	4,161
Road fork, 31 feet east of telephone pole, on south edge of con- crete road; chiseled cross, marked "P. T. 23 S.".....	38 47 28.56	77 03 38.32	2,275

From Gum Springs along highway to Hunter.

Prim. Trav. Sta. 18.....	38 44 37.50	77 04 52.58	.....
T road south, at southeast corner, 6 feet west of corner fence post, in hub; copper nail, marked "P. T. 30 S.".....	38 44 35.43	77 04 37.74	1,194
Bend in road, on east side of road, in root of tree; copper nail, marked "P. T. 31 S.".....	38 44 15.74	77 04 23.70	2,282
T road south, in southwest corner of, in root of small oak tree; copper nail, marked "P. T. 32 S.".....	38 44 08.90	77 03 58.63	2,100
Lane west to house, on east side of road, in root of pine tree; copper nail, marked "P. T. 33 S.".....	38 43 59.71	77 04 00.22	939
T road west, in southwest corner, in root of cedar tree; copper nail, marked "P. T. 34 S.".....	38 43 35.38	77 04 06.09	2,508
Road forks, on west side of road, in root of pine tree; copper nail, marked "P. T. 35 S.".....	38 43 25.26	77 04 08.25	1,040
Prim. Trav. Sta. 5.....	38 43 22.02	77 03 53.38	1,223

**CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN,
AND WASHINGTON QUADRANGLES—Continued.**

Southeast along highway to Warwick.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Prim. Trav. Sta. 16.....	38 45 57.08	77 05 03.22	.....
West side of road, 120 feet south of red gate, in root of oak tree; copper nail, marked "P. T. 38 S.".....	38 45 38.01	77 04 26.37	3,498
South side of road, top of hill, in root of locust tree; copper nail, marked "P. T. 39 S.".....	38 45 14.61	77 03 57.35	3,299
North side of road, 80 feet west of iron gate, in root of oak tree; copper nail, marked "P. T. 40 S.".....	38 44 59.18	77 03 42.01	1,977
Road forks, on concrete culvert south of; chiseled cross, marked "P. T. 41 S.".....	38 45 10.40	77 03 27.34	1,624
Prim. Trav. Sta. 14, Warwick.....	38 45 06.64	77 03 01.20	2,105

**From Pohick station north along highway to Barker's crossroads. (By School of Topography,
U. S. Army, in 1918.)**

Intersection of abandoned road and main road.....	38 43 25.40	77 12 34.95	.....
Prim. Trav. Sta. No. 1, nail on east side of road, at T road to left; in root of 24-inch jack pine tree.....	38 43 41.89	77 12 35.44	1,668
T road west, in center of road.....	38 44 18.50	77 12 41.22	3,733
Intersection with road west.....	38 44 27.33	77 12 43.40	909
Prim. Trav. Sta. No. 2, in curve of road, in stump 1 foot high; nail.....	38 44 54.24	77 12 44.87	2,725
Barker's crossroads, near Davis's store, intersection of roads; Prim. Trav. Sta. No. 3.....	38 45 34.08	77 13 04.80	4,328
Pohick Creek, middle of road crossing in.....	38 45 25.84	77 13 36.12	2,618
T road to farmhouse.....	38 45 23.86	77 13 48.23	980
Road intersection, T road to left.....	38 45 24.69	77 14 00.53	976

**Southeast along highway from road intersection at Gambol's store 1 mile south of Pohick School
to Pohick station.**

Second-class private road to left.....	38 45 11.41	77 13 55.47	1,400
Middle Run, center.....	38 45 01.29	77 14 02.40	1,162
Prim. Trav. Sta. No. 1, 50 feet east of intersection of main road and second-class road to Pohick School.....	38 44 36.79	77 14 04.13	2,482
Small culvert.....	38 44 28.74	77 13 56.16	1,030
Private road to left.....	38 44 25.23	77 13 52.60	453
Second-class abandoned road to south.....	38 44 14.77	77 13 43.26	1,292
Prim. Trav. Sta. No. 2, 8 feet east of center line of road, 7 feet west of blazed 10-inch black-oak tree; hub painted "P. T. No. 2".....	38 44 09.90	77 13 33.27	933
Prim. Trav. Sta. No. 3, west side of road, chiseled cross on con- crete post, "DCR 1914." painted "P. T. N. 3".....	38 43 54.79	77 13 18.29	1,937
Intersection of second-class road to left.....	38 43 50.18	77 13 15.99	500
Second-class road to right.....	38 43 24.81	77 13 04.70	2,719
Intersection of pulp-wood road to left, east side of road, in root of 14-inch white-oak tree; nail.....	38 43 18.51	77 12 54.22	1,050
Prim. Trav. Sta. No. 4, iron bridge over Pohick Creek, on north wing wall; chiseled cross painted "P. T. No. 4".....	38 43 12.03	77 12 43.14	1,096
Pohick station, road crossing, at end of bridge.....	38 43 12.31	77 12 34.65	673

**Along highways from Pohick Church southeast to rifle range. (By School of Topography, U. S.
Army, in 1918.)**

Prim. Trav. Sta. No. 1, nail in saddle of twin willow trees, 50 feet east of barn, painted "P. T. No. 1".....	38 42 03.06	77 11 47.51	.....
Nail in stake, 1 foot from trunk of 10-inch walnut tree, in front of Mrs. Grace Merchant's house, near rifle range.....	38 41 21.48	77 11 36.23	4,298
Prim. Trav. Sta. No. 2, stake 1 foot from trunk of 15-inch cedar tree, 1,800 feet west of brick house, on S. Shepard's farm.....	38 41 14.90	77 10 39.11	4,579
Prim. Trav. Sta. No. 3, nail in root of 9-inch cedar tree, on left side of road, 1,000 feet northwest of S. Shepard's house, painted "P. T. No. 3".....	38 41 31.33	77 10 13.70	2,614

CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN, AND WASHINGTON QUADRANGLES—Continued.**From Shiloh Church via Sycamore Point to Sandy Point.**

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Wood culvert.....	38	39	42.12	77	09	53.59	2,674
Gunston Hall, half a mile south of; concrete post east side of road forks, at angle in fence line; bronze tablet.....	38	39	28.97	77	09	42.64	.....
Nail in root of 12-inch blazed oak tree, on west side of road, 100 feet north of road.....	38	39	08.95	77	09	13.37	.....
Hub at northwest corner of crossroads.....	38	38	47.26	77	08	55.77	2,602
Prim. Trav. Sta. No. 2, on stump of 6-inch maple tree, 10 feet north of center line of road, 5 feet south of blazed maple tree, marked "Sta. No. 20".....	38	38	43.99	77	09	06.92	944
Nail in 3-inch pine stump, 8 feet north of center of roads.....	38	38	45.00	77	09	27.45	1,630
Root of 30-inch oak tree, 4 feet south of road, blazed and marked "Sta. 32".....	38	38	41.22	77	09	31.13	480
Prim. Trav. Sta. No. 3, nail in root of 24-inch pine tree, north side of road, blazed and marked "Sta. 38".....	38	38	36.00	77	09	42.38	1,040
Prim. Trav. Sta. No. 4, nail in root of tree, near small forks of road.....	38	38	29.37	77	10	03.71	1,820
Prim. Trav. Sta. No. 5, painted, nail in root of 10-inch pine tree, on south side of road.....	38	38	07.52	77	10	23.47	2,711
Prim. Trav. Sta. No. 6, nail in hub at intersection of Sycamore, and Sandy Point roads.....	38	38	40.67	77	10	25.00	2,719
Sycamore Point, U. S. Coast & Geodetic Survey station, 3-inch vitrified pipe set in cement, 5 feet from 12-inch pine tree and 4 feet from edge of 20-foot cliff, about 100 feet east of small ravine.....	38	37	27.68	77	10	23.86	1,316

Near intersection of Sycamore Point and Sandy Point roads.

Nail in root of red-oak tree, on west side of road, at edge of woods, 600 feet easterly on road is bridge.....	38	37	45.01	77	11	11.58	3,722
Prim. Trav. Sta. No. 7, nail in root of 20-inch oak stump, 20 feet high on south side of road.....	38	37	56.89	77	11	29.12	1,836
Bridge.....	38	37	59.37	77	11	43.51	1,167
Hub on north side of road, 25 feet east of wooden culvert.....	38	37	55.40	77	12	06.09	1,836
Sandy Point, Occoquan Bay, white flagpole (the stump only remains); U. S. Coast & Geodetic Survey point.....	38	37	57.11	77	12	46.84	3,240

From Primary Traverse Station 20 S to Primary Traverse Station 29 S. (By H. S. Senseney in 1920.)

Prim. Trav. Sta. No. 20 S (previously described).....	38	45	33.22	77	05	08.60	.....
Crossroads, 19 feet west of, on south side of east and west road; copper nail in hub marked "P. T. 28 S".....	38	45	37.18	77	05	45.35	2,938
Small bridge, 100 feet south of, in south side of road, 7 feet east of tree; copper nail in hub marked "P. T. 29 S".....	38	45	06.80	77	06	04.55	3,430

From Primary Traverse Station 1 B to Primary Traverse Station 29 S.

T road north, 1 foot south of concrete road; copper nail in hub, marked "P. T. P. No. 1 B".....	38	44	07.51	77	05	46.12	.....
Gate post, 2 feet east of, on north side of road; copper nail in hub, marked "P. T. 42 S".....	38	44	16.11	77	05	53.54	1,050
East and west wire fence, 13 feet north of, 14 feet east of end of north and south wire fence, on east edge of woods; copper nail in stump marked "P. T. 43 S".....	38	44	43.16	77	05	53.96	3,242
Prim. Trav. Sta. 29 S (previously described).....	38	45	06.80	77	06	04.55	2,064

From Gum Springs to old road forks near Doque Creek. (By D. S. Birkett in 1919.)

Gum Springs (previously described).....	38	44	20.86	77	05	20.09	.....
"P. T. P. 1 B" (previously described).....	38	44	07.51	77	05	46.12	2,465
Road forks, 12 feet west of large oak tree, 25 feet north of concrete road; copper nail in hub marked "P. T. P. 2 B".....	38	43	45.83	77	06	27.28	3,930
T road northwest, 25 feet west of, 2 feet north of concrete road, in concrete post; bronze tablet stamped "Prim. Trav. Sta. No. 12 B".....	38	43	37.29	77	06	44.43	1,610
T road west, in Y; copper nail in hub, marked "P. T. 4 B".....	38	43	55.05	77	06	49.46	1,840
T road northwest, at intersection; copper nail in hub, marked "P. T. 5 B".....	38	43	45.86	77	07	25.99	3,040
East and west road, 25 feet north of gate, 7 feet east of road; copper nail in stump, marked "P. T. 6 B".....	38	44	14.85	77	07	39.05	3,110
Road forks, in Y; copper nail in hub, marked "P. T. 7 B".....	38	44	22.70	77	07	43.53	868

Magnetic declination, 5° 35' W.

**CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN,
AND WASHINGTON QUADRANGLES—Continued.**

From old road forks near Dogue Creek to Potter's Hill crossroads. (By D. S. Birkett in 1920.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Road forks, at Dogue Creek, 8 feet north of road, in root of 12-inch gum tree; copper nail, marked "P. T. 11 B".....	38	44	21.12	77	07	57.46	1,114
Prim. Trav. Sta. No. 11 B, 3 feet west of, on same root; thin copper nail, tree painted "U. S. A. 26.1 B. M.," elevation, 25.94 feet.							
Road forks, 100 feet south of bridge, in Y; copper nail in hub, "P. T. 12 B," elevation, 59.54 feet.....	38	44	45.78	77	08	24.40	3,284
Hayfield Farm, at red gate, 12 feet south of Telegraph Road; bronze tablet in concrete post.....	38	45	06.73	77	08	23.75	2,118
Crossroads, 15 feet southwest of center of; copper nail in hub, marked "P. T. 14 B".....	38	45	16.96	77	08	38.49	1,558
T road west, 50 feet north of, 8 feet east of road; copper nail in root of 12-inch pine tree, marked "P. T. 15 B".....	38	45	48.73	77	09	07.91	3,970
Laurel Grove School, one-third of a mile south of, at junction with Potter's Hill and Franconia Road, 6 feet north of road; copper nail in cedar stump, marked "P. T. 16 B".....	38	45	57.95	77	09	21.18	1,404
Road forks, in Y; copper nail in hub, marked "P. T. 17 B".....	38	45	30.09	77	09	41.49	3,245
White house, opposite, on west edge of road; copper nail in hub, marked "P. T. 18 B".....	38	45	03.15	77	10	00.86	3,128
T road west, at base of mail box; copper nail in root of 10-inch pine stump, marked "P. T. 19 B".....	38	44	39.82	77	09	59.41	2,361
Potters Hill crossroads, 25 feet west of center of road, in top of concrete abutment; bronze tablet.....	38	44	28.81	77	09	42.61	1,735
Tie point, "Hawkins Four Corners" (See Bull. 551, p. 327).....	38	44	28.80	77	09	42.30	25

Magnetic declination, 4° 20' W.

From point near Laurel Grove School to point 2 miles southwest of Franconia.

"P. T. 16 B" (previously described).....	38	45	57.95	77	09	21.18	-----
Laurel Grove crossroads, 20 feet south of; copper nail in top of twin pine stump, marked "P. T. 21 B".....	38	46	13.30	77	09	12.77	1,688
T road east, at east edge of main road; copper nail in hub, marked "P. T. 22 B".....	38	46	33.94	77	08	57.12	2,427
Olivet Chapel, T road at, in root of oak tree used as sign board; nail, marked "P. T. 23 B".....	38	46	55.80	77	08	46.83	2,358
Franconia station, 0.25 mile south of; center of concrete bridge over Southern Ry. track; bronze tablet stamped "Prim. Trav. Sta. No. 3 B".....	38	46	46.38	77	09	24.95	3,180
Road forks north, opposite white house, at north edge of road; copper nail in hub, marked "P. T. 25 B".....	38	46	45.79	77	09	37.63	1,003
T road north, 20 feet east of, at base of mail box; copper nail in hub, marked "P. T. 26 B".....	38	46	41.18	77	10	05.68	2,270
Road forks northwest, 6 feet east of wood culvert; nail in hub, marked "P. T. 27 B".....	38	46	42.01	77	10	43.47	2,993
Dodson place, in front of, 25 feet east of road, in top of pine stump; nail, marked "P. T. 28 B".....	38	46	18.41	77	10	52.52	2,494
Road forks, tie point, Hawkins (See Bull. 551, p. 327).....	38	46	04.50	77	11	04.60	1,703

Magnetic declination, 4° 57' W.

Three positions not tied in.

Road forks, in Y, nail in hub marked "P. T. 29 B".....	38	46	04.19	77	11	04.65	32
Road forks.....	38	45	24.50	77	11	01.15	4,025
Second-class road forks east, east side of road; nail in hub, marked "P. T. 30 B".....	38	45	24.27	77	11	01.14	23

From crossroads at Pohick School southeast to Lorton. (By School of Topography, U. S. Army, in 1918. By D. S. Birkett in 1920.)

Pohick School crossroads, Sydenstricker Chapel; concrete post set 31 feet south.....	38	45	21.85	77	14	19.58	1,537
Middle Run, center, 50 feet west of road crossing.....	38	45	10.27	77	14	40.32	2,018
Private road.....	38	44	59.23	77	14	41.94	1,122
Intersection of roads to Lorton and Pohick stations, 1 mile southwest of Pohick School crossroads.....	38	44	43.64	77	15	02.00	2,239
T road to right, private road.....	38	44	13.18	77	15	09.46	3,139
Three corners.....	38	44	10.94	77	15	10.09	233
Small wooden culvert.....	38	43	45.18	77	15	01.17	2,700
Prim. Trav. Sta. No. 5, intersection of Occoquan and Lorton roads—Prim. Trav. Sta. 47 B. Silver Brook School 0.7 mile north of, at junction of Silver Brook and Hose roads, in southeast angle of crossroads; concrete post, marked "P. T. S. No. 16 B".....	38	43	41.12	77	15	03.25	445

CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN, AND WASHINGTON QUADRANGLES—Continued.

From crossroads at Pohick School southeast to Lorton—Continued.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Small concrete culvert.....	38	43	36.17	77	14	45.28	1,508
Second-class roads; T road west.....	38	43	14.63	77	14	22.04	2,853
Second-class road to right.....	38	43	09.38	77	14	16.60	680
Private road to left.....	38	42	56.19	77	14	02.22	1,755
District of Columbia Reformatory Farm, entrance to, 1.1 miles northwest of Lorton; nail in root of twin oak, painted Prim. Trav. Sta. No. —.....	38	42	53.22	77	13	59.18	387
Prim. Trav. Sta. No. 54 B, private T road northeast, on base of telephone pole; hub and copper nail.....	38	42	30.96	77	13	41.58	2,650
Lorton station, 600 feet north of, center of northbound track, Richmond, Fredericksburg & Potomac R. R. bridge over Washington and Richmond Highway; Prim. Trav. Sta. No. 7.....	38	42	20.17	77	13	16.50	2,268

Magnetic declination, 5° 32' W.

From Lorton via Occoquan Workhouse and Silver Brook School to point on Rolling Road 2 miles north of Pohick School.

Lorton, Prim. Trav. Sta. No. 38 B, opposite Lorton Telephone Co.'s office, at base of telephone pole; hub and copper nail....	38	42	16.27	77	13	40.56	.....
Prim. Trav. Sta. No. 39 B, bridge over Mill Creek, in floor near north rail; copper nail.....	38	42	19.28	77	14	12.86	2,577
Road forks, oppositesignboard marked "Government Reservation," in concrete post; elevation 234.371 feet, bronze tablet stamped "Prim. Trav. Sta. No. 20 B".....	38	42	10.39	77	14	42.59	2,524
Prim. Trav. Sta. No. 41 B, west side of road forks, 800 feet northwest of District of Columbia Reformatory stables; chiseled square in concrete drain cover.....	38	42	01.76	77	15	15.08	2,718
Prim. Trav. Sta. No. 42 B, T road, 1,000 feet northwest of District of Columbia farm watch tower, at base of signboard marked "To Washington," on top of cement curb; chiseled square, painted "P. T. 42 B".....	38	41	57.78	77	15	23.44	775
Prim. Trav. Sta. No. 43 B, road forks, about 0.4 mile north of District of Columbia Reformatory buildings, at foot of 10-inch oak tree in Y, painted "P. T. 43 B".....	38	42	24.22	77	15	31.98	2,759
District of Columbia, old Reformatory boundary post at road forks.....	38	42	29.23	77	15	23.91	817
Prim. Trav. Sta. No. 45 B, 25 feet north of Giles Run, west edge of road, in top of 10-inch oak stump; copper nail.....	38	42	56.17	77	15	10.48	2,925
Prim. Trav. Sta. No. 46 B, road forks, about 600 feet southwest of white house.....	38	43	27.19	77	15	11.34	3,139
Prim. Trav. Sta. No. 47 B, old point Prim. Trav. Sta. No. 5 (previously described).....	38	43	41.12	77	15	03.25	1,546
Prim. Trav. Sta. No. 48 B, T road, 1,100 feet southeast of Silver Brook Chapel, at fence corner; copper nail in hub.....	38	43	23.09	77	14	28.17	3,326
Prim. Trav. Sta. No. 49 B, on root of 12-inch oak tree, 0.3 mile south of South Run, on north slope of hill, 30 feet east of fence.....	38	43	44.50	77	14	02.15	2,990
Prim. Trav. Sta. No. 50 B, at road intersection, south edge of third-class road, in root of twin oak tree; copper nail.....	38	44	14.04	77	13	43.66	3,330
Prim. Trav. Sta. No. 51 B, opposite gate at T road north, south side of road, in top of 4-inch oak stump; copper nail.....	38	44	25.31	77	13	52.65	1,345
Prim. Trav. Sta. No. 52 B, south edge of road, 100 feet east of Pohick Creek, south edge of field; copper nail in top of 3-inch oak stump.....	38	44	32.10	77	13	25.65	2,246
Prim. Trav. Sta. No. 53 B, hub, east side of Rolling Road, opposite T road, on base of 12-inch stump 7 feet high; copper nail.....	38	44	32.10	77	12	43.23	3,361
Old Prim. Trav. Sta. No. 2, top of 8-inch pine stump (previously described).....	38	44	54.24	77	12	44.87	2,244

Magnetic declination, 5° 30' W.

Continuation of line from Gum Springs to junction of gravel and telegraph roads.

Prim. Trav. Sta. No. 8 B, opposite white house, 3 feet northwest of fence line; copper nail in hub.....	38	44	36.48	77	07	29.73	1,772
Prim. Trav. Sta. No. 9 B, 150 feet south of brook, 5 feet east of road; copper nail in hub. Elevation 30.13 feet.....	38	44	54.52	77	07	14.25	2,198
Prim. Trav. Sta. No. 10 B (old Prim. Trav. No. 1), nail in root of sweet-gum tree. Elevation 35.85 feet.....	38	45	06.72	77	07	03.83	1,484
Prim. Trav. Sta. No. 62 B (t. b. m. 43.9), 0.6 mile southeast of forks of gravel and telegraph roads; copper nail in root of tree.....	38	45	41.10	77	07	01.50	3,479
Junction of telegraph and gravel roads (previously described).....	38	45	02.35	77	07	17.25	2,482

CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN,
AND WASHINGTON QUADRANGLES—Continued.

Along highway from New Alexandria northwest to Fairfax courthouse. (By H. S. Senseney in 1920.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Prim. Trav. Sta. No. 23 S (previously described).....	38	47	28.56	77	03	38.32	.....
Prim. Trav. Sta. No. 44 S, south side of road, in top of post at mail box; copper nail.....	38	47	38.69	77	04	15.40	3,112
Prim. Trav. Sta. No. 45 S, in rear of Pullman's store at road forks, 2½ feet east of northeast corner of small brick building; copper nail in hub.....	38	47	54.45	77	04	48.39	3,060
Prim. Trav. Sta. No. 46 S, in west end of trestle, 2 feet north of north rail of most southerly track, 21 feet west of center of road; copper nail.....	38	48	16.34	77	04	27.80	2,750
Prim. Trav. Sta. No. 47 S, at road crossing, just south of south rail of south trestle.....	38	48	19.14	77	05	16.66	3,880
Prim. Trav. Sta. No. 48 S, north side of road, at T road south; copper nail.....	38	48	29.82	77	05	15.06	1,086
Alexandria, about 1 mile west of, at northeast corner of T road north, at H. W. Stanton's store, on concrete culvert, in chiseled cross; tablet stamped "Prim. Trav. Sta. 4 S".....	38	48	30.77	77	05	19.70	380
Prim. Trav. Sta. No. 50 S, at southeast corner of T road south, in top of stump; copper nail.....	38	48	36.77	77	05	52.60	2,675
Prim. Trav. Sta. No. 51 S, north side of road, 12 feet west of lane north through gate; copper nail in hub.....	38	48	44.07	77	06	28.04	2,902
Prim. Trav. Sta. No. 52 S, north side of road, 12 feet west of lane through gate, in top of stump; copper nail.....	38	48	42.59	77	07	01.94	2,687
Prim. Trav. Sta. No. 53 S, on west side of lane north, 5 feet north of road gate, in root of tree; copper nail.....	38	48	46.38	77	07	30.95	2,329
Lincolnia, Prim. Trav. Sta. No. 54 S, at northeast corner of crossroads, 2.6 feet south of tree; copper nail in hub (post No. 5 to be set here).....	38	48	56.26	77	08	13.17	3,489
Prim. Trav. Sta. No. 55 S, at northeast corner of T road north, in root of tree.....	38	49	06.24	77	08	36.50	2,105
Prim. Trav. Sta. No. 56 S, on south side of road, 6 feet north of telephone pole 244, in stump; copper nail.....	38	49	12.33	77	09	11.45	2,834
Lincolnia, 1½ miles northwest of, 20 feet north and 28 feet east of crossroads, Prim. Trav. Sta. No. 57 S; copper nail in hub (post No. 6 to be set here).....	38	49	21.58	77	09	48.72	3,097
Prim. Trav. Sta. No. 58 S, south side of road, at road forks, 3½ feet south of fence, in top of stump; copper nail.....	38	49	30.71	77	10	27.83	3,232
Prim. Trav. Sta. No. 59 S, north side of road, 40 feet east of G. H. Nash's mail box, in stump; copper nail.....	38	49	42.35	77	11	06.40	3,273
Annapdale, Prim. Trav. Sta. No. 60 S, 150 feet west of McDaniels's store, on south side of road, 30 feet west of road forks; copper nail in hub (post No. 7 to be set here).....	38	49	49.94	77	11	49.88	3,527
Prim. Trav. Sta. No. 61 S, 4 feet west of telephone pole 369, in top of stump; copper nail.....	38	49	56.25	77	12	26.84	2,995
Prim. Trav. Sta. No. 62 S, south side of road, 20 feet east of T road north, 3 feet north of fence post; copper nail in hub.....	38	50	04.08	77	13	05.54	3,163
Prim. Trav. Sta. No. 63 S, cross cut in south end of east abut- ment of bridge.....	38	50	08.63	77	13	39.46	2,725
Annapdale, about 2 miles west of, on south side of road, 8 feet east of corner fence, Prim. Trav. Sta. No. 64 S (post No. 8 to be set here).....	38	50	12.48	77	14	20.77	3,293
Ilda, Prim. Trav. Sta. No. 65 S, in southwest corner of road forks, in root of oak tree; copper nail.....	38	50	18.17	77	15	06.38	3,656
Prim. Trav. Sta. No. 66 S, at base of P. R. Labouisse's mail box, in hub; copper nail.....	38	50	23.16	77	15	42.35	2,891
Fairfax courthouse, about 2 miles east of, at northwest corner of T road north, Prim. Trav. Sta. No. 67 S; copper nail in hub (post No. 9 to be set here).....	38	50	29.05	77	16	25.30	3,450
Prim. Trav. Sta. No. 68 S, north side of road, 60 feet west of house, in stump; copper nail.....	38	50	34.33	77	17	06.09	3,273
Prim. Trav. Sta. No. 69 S, north side of road, 60 feet west of T road south, on culvert; chiseled cross.....	38	50	35.88	77	17	18.82	1,019
Prim. Trav. Sta. No. 70 S, on south side of road, at top of hill, 3 feet west of white gatepost, in hub; copper nail.....	38	50	39.92	77	17	52.37	2,687

From Fairfax south along highways to Occoquan.

Fairfax, on north side of courthouse, in west end of top of step; bronze tablet stamped 447 (this tablet will also be stamped "Prim. Trav. Sta. No. 10 S 1920").....	38	50	40.60	77	18	26.12	2,755
Prim. Trav. Sta. No. 71 S, west side of road, at second-class road west, in stump; copper nail.....	38	50	17.18	77	18	44.44	3,310
Prim. Trav. Sta. No. 72 S, on west side of road, 8 feet north of bargate, in hub; copper nail.....	38	49	53.02	77	18	56.16	2,614

CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN,
AND WASHINGTON QUADRANGLES—Continued.

From Fairfax south along highways to Occoquan—Continued.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Fairfax courthouse, about 2 miles south of, 25 feet south and 20 feet west of cross roads, Prim. Trav. Sta. No. 73 S; copper nail in hub (post No. 11 S will be set here).....	38	49	39.22	77	19	01.13	1,452
Prim. Trav. Sta. No. 74 S, on east side of road, 20 feet north of fenceline, in hub; copper nail.....	38	49	09.96	77	19	12.37	3,091
Prim. Trav. Sta. No. 75 S, on east side of road, 30 feet south of road forks, in stump; copper nail.....	38	48	45.50	77	19	28.09	2,771
Prim. Trav. Sta. No. 76 S, on west side of road, 20 feet north of driveway to yellow house on hill, in hub; copper nail.....	38	48	22.19	77	19	37.52	2,474
Fairfax station, Prim. Trav. Sta. No. 77 S, 12 feet south and 15 feet east of south end of highway bridge over Southern Ry.; copper nail in hub (post No. 12 S to be set here).....	38	47	59.91	77	19	41.06	2,272
Prim. Trav. Sta. No. 78 S, on west side of road, at Mrs. Carroll's mail box, in hub; copper nail.....	38	47	32.36	77	19	31.20	2,895
Prim. Trav. Sta. No. 79 S, at base of telephone pole, at southeast corner of road forks, in hub; copper nail.....	38	47	07.60	77	19	31.51	2,505
Prim. Trav. Sta. No. 80 S, at southeast corner of crossroads, in top of stump; copper nail.....	38	46	52.78	77	19	40.87	1,674
Prim. Trav. Sta. No. 81 S, on east side of road, in root of large stump; copper nail.....	38	46	39.93	77	19	11.31	2,678
Belleair School, at out 1 mile southwest of, 25 feet south and 30 feet west of road forks; iron post stamped "Prim. Trav. Sta. No. 13 S, 1920".....	38	46	03.89	77	18	52.57	3,936
Prim. Trav. Sta. No. 82 S, east side of road, 18 feet south of lane, in stump; copper nail.....	38	45	39.47	77	18	31.83	2,967
Prim. Trav. Sta. No. 83 S, on west side of road, 90 feet north of second-class road south at two mail boxes, in hub; copper nail.....	38	45	14.76	77	18	10.61	3,012
Prim. Trav. Sta. No. 84 S, 1 foot south of fence post, on south side of lane west to house, in hub; copper nail.....	38	44	55.73	77	17	46.21	2,726
Prim. Trav. Sta. No. 85 S, on west side of road, in root of oak tree; copper nail.....	38	44	38.51	77	17	23.37	2,512
Ox Road School, about 2 miles north of, 25 feet south and 12 feet east of road forks; concrete post stamped "Prim. Trav. Sta. 14 S. Elev. 324." Elevation 323.290 feet.....	38	44	33.55	77	17	14.40	869
Prim. Trav. Sta. No. 87 S, on north side of road, in front of yellow house on hill, in root of oak tree; copper nail.....	38	44	16.86	77	16	59.93	2,040
Prim. Trav. Sta. No. 88 S, 35 feet east of road, on south side of second-class road, in stump; copper nail.....	38	44	01.26	77	16	45.03	1,970
Prim. Trav. Sta. No. 89 S, on west side of road, 70 feet north of second-class road west, in root of oak tree; copper nail.....	38	43	27.15	77	16	52.17	3,498
Prim. Trav. Sta. No. 90 S, on north side of road, 120 feet east of road forks, in oak tree; copper nail.....	38	43	10.33	77	16	34.17	2,221
Davis store, 150 feet east of, 12 feet east of center of road, 3 feet north of telephone pole, in concrete post; bronze tablet stamped "Prim. Trav. Sta. No. 15 S".....	38	43	07.41	77	16	15.21	1,532
Prim. Trav. Sta. No. 92 S, in front of house 40 feet west of road, in root of pine tree; copper nail.....	38	42	45.92	77	15	48.69	3,024
Prim. Trav. Sta. No. 43 B (previously described).....	38	42	24.22	77	15	31.98	2,564
Occoquan Bridge, 80 feet north of north end of highway bridge over Occoquan Creek, 10 feet west of road, on top of large rock; bronze tablet stamped Prim. Trav. Sta. No. 16. Elevation 20.247 feet.....	38	41	11.79	77	15	44.50	7,394

From Lorton south along Southern Ry. to Colchester and west and north to Washington and Richmond highway. (By D. S. Birkett in 1920.)

Lorton station, about 600 feet north of (previously described)...	38	42	20.17	77	13	16.50	.....
Lorton station, center line of track.....	38	42	10.37	77	13	19.68	1,020
Overhead crossing.....	38	41	48.53	77	13	26.77	2,280
Milepost 19 from Washington.....	38	41	03.53	77	13	39.79	4,667
Colchester, Prim. Trav. Sta. No. 1 on concrete abutment of undergrade crossing.....	38	40	16.29	77	14	05.67	5,200
Occoquan railroad bridge, on curtain wall abutment, east end of bridge; painted square.....	38	40	04.90	77	14	22.53	1,766
Occoquan bridge, center line.....	38	40	07.90	77	14	18.09	464
Colchester station, 0.4 mile west of; Prim. Trav. Sta. No. 35 B, 5 feet west of second-class road up Occoquan Creek, at edge of field, in top of 12-inch oak stump; copper nail. Elevation 85.46 feet.....	38	40	23.32	77	13	23.36	1,574
Prim. Trav. Sta. No. 36 B, 800 feet west of road forks, on concrete culvert over small creek, south end; chiseled square. Elevation 33.95.....	38	40	35.66	77	14	41.63	1,914
Prim. Trav. Sta. No. 37 B, in Y, at road forks, 30 feet south of stone steps, painted "P. T. 37 B"; top of hub.....	38	40	43.53	77	14	52.30	1,162

CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN, AND WASHINGTON QUADRANGLES—Continued.

From Lorton south along Southern Ry. to Colchester and west and north to Washington and Richmond Highway—Continued.

Station.	Latitude.	Longitude.	Distance between stations.
Prim. Trav. Sta. No. 55 B, just north of clearing north of house, in root of oak tree; copper nail.....	38 41 13.15	77 14 32.56	<i>Feet.</i> 3,383
Prim. Trav. Sta. No. 56 B, in small stump, north side of T road west; copper nail.....	38 41 25.52	77 14 15.32	1,852
Prim. Trav. Sta. No. 57 B, near dim road forks, about 300 feet south of hollow, on 10-foot bank, 40 feet west of road, in small stump; copper nail.....	38 41 43.58	77 14 14.22	1,829
Prim. Trav. Sta. No. 40 B (previously described), at road forks, at sign marked "Government Reservation".....	38 42 10.39	77 14 42.59	3,525

Magnetic declination, 4° 23' W., 1920.

From forks of telegraph and gravel roads southwest to a point two miles southwest of Alexandria. (By D. S. Birkett in 1920.)

Prim. Trav. Sta. No. 5 (previously described).....	38 46 02.35	77 07 17.25	.....
Prim. Trav. Sta. No. 63 B, northeast corner of T road north, in wooden culvert; copper nail.....	38 46 28.56	77 06 41.49	3,880
Prim. Trav. Sta. No. 64 B, on north side of road, 100 feet west of private crossroads, in concrete culvert over small stream; chiseled square.....	38 46 54.95	77 06 17.41	3,282
Prim. Trav. Sta. No. 65 B, east side of private T road south, 21 feet north of intersection, near telephone pole, in hub; copper nail.....	39 47 07.78	77 05 49.63	2,554
Prim. Trav. Sta. No. 66 B, 20 feet south of Y in road, in intersection, in root of cedar tree; copper nail.....	38 47 18.76	77 05 15.54	2,918
Intersection of Alexandria and Franconia road and telegraph road, in concrete abutment of steel bridge over Pike Branch; bronze tablet.....	38 47 35.70	77 05 02.40	2,000
Prim. Trav. Sta. No. 45 S (previously described).....	38 47 54.45	77 04 48.39	2,205

South from Lewis Chapel to Occoquan Bay. (By D. S. Birkett in 1920.)

Lewis Chapel crossroads (previously described).....	38 41 13.94	77 12 31.75	.....
Prim. Trav. Sta. No. 68 B, 14 feet east of T. B. M. 145.8, 40 feet north of dim road forks, 4,000 feet south of Lewis Chapel, on west side of road, in root of twin oak tree; copper nail.....	38 40 34.44	77 12 30.26	3,998
Prim. Trav. Sta. No. 69 B, temporary bench mark 138.3, one-fourth of a mile south of Lewis Chapel, at road forks, 240 feet north of small house, on east side of road, in small stump; copper nail.....	38 40 10.75	77 12 33.11	2,409
Prim. Trav. Sta. No. 70 B, at private-road crossing, 50 feet south of intersection, in very small stump; copper nail.....	38 39 53.95	77 12 29.98	1,718
Prim. Trav. Sta. No. 71 B, 900 feet due southeast of J. T. Haislaip's house (Belmont Farm), 30 feet southwest of south corner of orchard fence, in concrete post, bronze tablet.....	38 39 36.58	77 12 01.56	2,862

Magnetic declination, 5° 57' W.

Southwest from Lewis Chapel to a point on the Richmond, Fredericksburg & Potomac R. R. 1 mile north of Colchester.

Lewis Chapel crossroads (previously described).....	38 41 13.94	77 12 31.75	.....
Lewis Chapel, 0.5 mile southwest of, Prim. Trav. Sta. No. 72 B, 45 feet northeast of intersection of private gravel roads, on west side of road, 100 feet west of small stream; copper nail in stump.....	38 40 59.78	77 13 03.26	2,878
Lewis Chapel, 0.75 mile southwest of, Prim. Trav. Sta. No. 73 B, opposite very old frame house (unoccupied) at top of steep hill, 8 feet north of gum tree, on south side of road, in hub; copper nail.....	38 40 47.60	77 13 15.97	1,591
Prim. Trav. Sta. No. 33 B, in plank, east side of second-class road crossing, about 1 mile north of Colchester on Richmond, Fredericksburg & Potomac R. R.; copper nail.....	38 40 51.71	77 13 42.08	2,108
Prim. Trav. Sta. No. 1, at Colchester station (previously described).....	38 40 16.29	77 14 05.67	4,042

Magnetic declination, 5° 56' W.

CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN, AND WASHINGTON QUADRANGLES—Continued.

Along highways from Barker's crossroads on Rolling Road and south to Sydenstricker Chapel (Pohick School). (By D. S. Birkett in 1920.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Barkers crossroads, Prim. Trav. Sta. No. 3 (previously described).	38 45 34.08	77 13 04.80	.....
Barkers crossroads, 50 feet north of Davis's store, 15 feet north-west of road, at T road east in concrete post; bronze tablet stamped "Prim. Trav. Sta. No. 9 B".	38 45 34.13	77 13 04.58	20
Prim. Trav. Sta. No. 58 B, at intersection of private-road forks northwest, in hub; copper nail.	38 45 48.01	77 13 19.86	1,850
Prim. Trav. Sta. No. 59 B, at road forks, in root of large oak tree; copper nail.	38 46 16.35	77 13 56.43	4,075
Prim. Trav. Sta. No. 60 B, 20 feet south of intersection of Rolling Road and old Fairfax Road, in hub; copper nail.	38 46 41.53	77 14 15.47	2,960
Prim. Trav. Sta. No. 61 B, on west side of Pohick Creek, at ford, in gum stump; copper nail.	38 46 21.54	77 14 33.28	2,466
Prim. Trav. Sta. No. 75 B, 100 feet south of T road east, 20 feet south of large pine tree, on east side of road, on top of stump 3 feet high; copper nail.	38 45 45.85	77 14 43.53	3,700
Sydenstricker Chapel (Pohick School), near intersection of crossroads, in concrete post; bronze tablet stamped "Prim. Trav. Sta. No. 10 B".	38 45 21.54	77 14 19.61	.....

Magnetic declination, 5° 42' W.

West along Southern Ry. from Seminary station to Fairfax station. (By H. S. Senseney in 1920.)

Prim. Trav. Sta. No. 47 S (previously described)	38 48 19.14	77 05 16.66	.....
Cameron Run, 850 feet east of, on top of southwest corner of south abutment of Southern Ry. bridge, about 4 feet above track; aluminum tablet stamped "54, Prim. Trav. Sta. No. 17 S, 1920".	38 48 23.06	77 06 24.52	5,386
Lincolnshire station, 12 feet south and 25 feet west of road crossing, in hub P. T. 98 S; copper nail.	38 48 05.51	77 08 02.90	7,986
Edsall, 35 feet west of station, 23 feet south of south rail of south track, in concrete post; bronze tablet stamped "Prim. Trav. Sta. No. 19".	38 47 42.39	77 09 28.64	7,179
Springfield, 510 feet east of station, in west abutment of railroad bridge over Back Lick Run, in top of stone at south end; aluminum tablet stamped "215, Prim. Trav. Sta. No. 20 S, 1920".	38 47 48.11	77 11 00.70	7,309
Prim. Trav. Sta. No. 101 S., at southeast corner of second-class road crossing, on culvert; chiseled square.	38 47 44.57	77 11 51.74	4,055
Prim. Trav. Sta. No. 102 S., in north end of east abutment of bridge over Accotink Creek; chiseled square.	38 47 34.28	77 13 03.09	5,743
Ravensworth, 22 feet north of northeast corner of station, Prim. Trav. Sta. No. 103 S., in hub; copper nail.	38 47 46.09	77 14 14.06	5,744
Prim. Trav. Sta. No. 104 S., in center of southbound track under highway bridge over railroad; copper nail.	38 47 45.32	77 14 55.31	3,265
Burke, 30 feet east of operator's window at station, Prim. Trav. Sta. No. 105 S., in north end of platform; copper nail.	38 47 42.91	77 16 12.03	6,079
Burke, 0.25 mile west of, Prim. Trav. Sta. No. 106 S., 15 feet south of track, 50 feet west of road crossing, 5 feet below line of track, in top of southeast corner of concrete culvert; aluminum tablet stamped "262 Prim. Trav. Sta. No. 22 S, 1920".	38 47 51.33	77 16 31.39	1,75
Prim. Trav. Sta. No. 107 S., near center of side track, on east edge of second-class road crossing, 230 feet east of trestle over Pohick Creek; copper nail.	38 47 53.97	77 17 02.39	2,466
60 feet west of road crossing, 9 feet south of track and 7 feet east of telephone pole; in top of concrete post, tablet stamped "24 S".	38 47 51.06	77 18 06.68	5,098
Sideburn, 25 feet east of station, Prim. Trav. Sta. No. 109 S., about 6 inches south of north rail of southbound track, in tie; copper nail.	38 48 00.33	77 18 33.38	2,312
Prim. Trav. Sta. No. 77 S, Fairfax station (previously described).	38 47 59.91	77 19 41.06	5,356

From Springfield station south on highway about 1½ miles.

Springfield, Prim. Trav. Sta. No. 20 S (previously described)	38 47 48.11	77 11 00.70	.....
Prim. Trav. Sta. No. 110 S., on west side of road, 60 feet north of road forks, in root of pine tree; copper nail.	38 47 20.34	77 11 12.14	2,957
Crossing of Back Lick and old Fairfax roads, in concrete post; bronze tablet.	38 46 45.25	77 11 05.67	3,594
Prim. Trav. Sta. No. 27 B, 1½ miles south of Springfield (previously described)	38 46 42.01	77 10 43.47	1,795

**CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN,
AND WASHINGTON QUADRANGLES—Continued.**

From a point 1.25 miles south of Lincolnia along highway to Lincolnia.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Fect.
Prim. Trav. Sta. No. 23 B (previously described).....	38 46 55.80	77 08 46.63	.....
Prim. Trav. Sta. No. 112 S, on south side of road at T road north, in root of tree; copper nail.....	38 47 02.51	77 08 11.05	2,895
Prim. Trav. Sta. No. 113 S, east side of road, at T road west, in root of oak tree; copper nail.....	38 47 37.71	77 08 13.96	3,570
Lunt, Prim. Trav. Sta. No. 114 S, railroad trestle over highway, on south end of east abutment; chiseled square.....	38 47 54.30	77 08 04.48	1,839
Prim. Trav. Sta. No. 98 S, Lincolnia (previously described).....	38 48 05.51	77 08 02.90	1,144

From a point 1 mile north of the Ox Road School east to crossroads, 0.5 mile northwest of Silver Brook School. (By D. S. Birkett in 1920.)

Prim. Trav. Sta. No. 88 S (previously described).....	38 44 01.26	77 16 45.03	.....
Prim. Trav. Sta. No. 90 B, in stump at road forks; copper nail..	38 44 11.45	77 16 31.35	1,494
Prim. Trav. Sta. No. 91 B, 40 feet east of orchard fence where private road enters woods, in root of pine tree; copper nail....	38 44 16.26	77 16 08.47	1,878
Prim. Trav. Sta. No. 92 B, at crossroad near creek, in root of birch tree; copper nail.....	38 44 05.70	77 16 00.80	1,230
Prim. Trav. Sta. No. 93 B, 30 feet east of crossroads gate, in root of birch tree; copper nail.....	38 43 41.34	77 15 28.79	3,538
Prim. Trav. Sta. No. 47 B (previously described).....	38 43 41.12	77 15 03.25	2,023

Magnetic declination, 5° 46' W.

From Olivet Chapel southeast via Triplett place to forks of Gravel and Telegraph roads.

Prim. Trav. Sta. No. 23 B (previously described).....	38 46 55.80	77 08 46.63	.....
Prim. Trav. Sta. No. 94 B, 100 feet southeast of white farm house, in root of locust tree; copper nail.....	38 46 41.69	77 08 08.38	3,348
Prim. Trav. Sta. No. 95 B, in small wooden bridge over Dogue Creek; copper nail.....	38 46 28.74	77 08 04.15	1,352
Prim. Trav. Sta. No. 96 B, Humphreys place, about three- fourths of a mile west of fork of Telegraph and Gravel roads, 50 feet southeast of white house on edge of hill, in root of maple tree; copper nail.....	38 46 12.32	77 08 02.02	1,670
Prim. Trav. Sta. No. 5, at forks of Telegraph and Gravel roads (previously described).....	38 46 02.35	77 07 17.25	3,686

Magnetic declination, 4° 22' W.

From crossroads 1.5 miles south of Burke southwest to Ox Road School. (By D. S. Birkett in 1920.)

Prim. Trav. Sta. No. 88 B (previously described).....	38 46 37.09	77 16 33.48	.....
Prim. Trav. Sta. No. 113 B, 15 feet northwest of road forks, 2.5 feet from burned stump, in hub; copper nail.....	38 46 23.75	77 17 08.16	3,062
Prim. Trav. Sta. No. 114 B, at T road, 10 feet north of oak tree, 15 feet west of center line of road, in hub; copper nail.....	38 46 06.90	77 17 19.00	1,912
Prim. Trav. Sta. No. 115 B, at road forks, in oak root; copper nail.	38 45 47.85	77 17 22.68	1,950
Prim. Trav. Sta. No. 116 B, at center of road forks, 15 feet south- west to marked tree, in hub; copper nail.....	38 45 27.89	77 17 41.34	2,504
Prim. Trav. Sta. No. 117 B, 60 feet north of creek at ford, 5 feet west of center line of road; copper nail in ash root.....	38 45 07.07	77 17 33.40	2,199
Prim. Trav. Sta. No. 86 S, 2 miles north of Ox Road School (previously described).....	38 44 33.55	77 17 14.40	3,710

Magnetic declination, 5° 56' W.

From Lee Chapel to point 1 mile northwest of Pohick School. (By D. S. Birkett in 1920.)

U. S. Geological Survey permanent bench mark; Lee Chapel (Prim. Trav. Sta. No. 2, 1911) (previously described).....	38 45 19.75	77 16 37.25	.....
Prim. Trav. Sta. No. 118 B, at T road, in pine root; copper nail.	38 45 06.81	77 16 05.94	2,804
Prim. Trav. Sta. No. 119 B, 300 feet west to creek, 60 feet west of old mill barracks, in stump; copper nail.....	38 45 22.11	77 15 48.92	2,062
Prim. Trav. Sta. No. 120 B, 500 feet south of house, 5 feet west of center of road, in oak root; copper nail.....	38 45 33.00	77 15 17.68	2,715
Prim. Trav. Sta. No. 77 B, 1 mile northwest of Pohick School (previously described).....	38 45 58.39	77 15 09.94	2,646

Magnetic declination, 5° 48' W.

CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN,
AND WASHINGTON QUADRANGLES—Continued.

From point near Gunston Hall to Sandy Point. (U. S. C. & G. S. station.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Prim. Trav. Sta. No. 1, 1918, School of Topography (previously described).....	38	39	29.33	77	09	42.96	.....
Prim. Trav. Sta. No. 108 B, 500 feet northeast of road forks, 10 feet east of roads, in tree root; copper nail.....	38	38	58.96	77	09	52.70	3,168
Prim. Trav. Sta. No. 109 B, 150 feet north of creek, 20 feet east of road, in root of 2-inch beech tree; copper nail.....	38	38	45.75	77	10	15.80	2,267
Prim. Trav. Sta. No. 110 B, south side of road, 30 feet from center of road, in pineroot; copper nail.....	38	38	41.73	77	10	55.80	3,198
Prim. Trav. Sta. No. 111 B, at road forks, in pine root; copper nail.....	38	38	30.11	77	11	22.84	2,445
Prim. Trav. Sta. No. 112 B, at road fork, in oak root, "No trespassing" sign on tree; copper nail.....	38	38	00.72	77	11	55.00	3,918
U. S. Coast and Geodetic Survey triangulation station, Sandy Point.....	38	37	57.11	77	12	46.84	4,130

Magnetic declination, 5° 37' W.

From a point about 2 miles southwest of Alexandria west along old Fairfax Road.

Prim. Trav. Sta. No. 67 B (previously described).....	38	47	35.65	77	05	02.48	.....
Prim. Trav. Sta. No. 74 B, forks of Alexandria and Franconia road, 0.7 mile west of private T road north, east end of gate, 25 feet east of intersection, in stump near telephone pole; copper nail.....	38	47	29.81	77	05	50.42	3,839
Prim. Trav. Sta. No. 82 B, private T road north, 25 feet south of old Fairfax Road, in root of large cherry tree; copper nail.....	38	47	29.58	77	06	08.79	1,452
Prim. Trav. Sta. No. 83 B, on south side of road, about 170 feet east of large frame house south of road, on top of concrete culvert; chiseled square.....	38	47	19.81	77	06	46.70	3,160
Prim. Trav. Sta. No. 3 (previously described).....	38	47	10.63	77	07	20.30	2,816

Magnetic declination, 5° 32' W.

From a point 1.5 miles south of Lee Chapel over highways to Burke.

Prim. Trav. Sta. No. 86 B (previously described).....	38	44	33.55	77	17	14.40	.....
Prim. Trav. Sta. No. 84, in south corner of bridge over South Run; copper nail. Elevation 323.78 feet.....	38	44	50.80	77	16	55.28	2,313
U. S. Geological Survey position at Lee Chapel, Prim. Trav. Sta. No. 2, Va. 1911 (new value).....	38	45	19.75	77	16	37.25	3,259
Prim. Trav. Sta. No. 85 B, 10 feet east of creek, 8 feet south of road, in stump; copper nail.....	38	45	31.32	77	16	24.90	1,527
Prim. Trav. Sta. No. 86 B, 50 feet west of road fork, in root of large oak tree; copper nail.....	38	45	52.57	77	16	22.74	2,158
Prim. Trav. Sta. No. 87 B, in east side of wooden bridge; copper nail.....	38	46	12.43	77	16	19.82	2,022
Prim. Trav. Sta. No. 88 B, 10 feet northeast of crossroads, 1.5 miles south of Burke, about 100 feet west of large dead tree, in hub; copper nail.....	38	46	37.09	77	16	33.48	2,720
Prim. Trav. Sta. No. 89 B, 25 feet from center of T road, in northeast corner near fence post, in hub; copper nail.....	38	47	01.91	77	16	46.57	2,718
Prim. Trav. Sta. No. 105 B, 600 feet west of Burke, northeast abutment of iron bridge, in sandstone rock; chiseled square.....	38	47	33.25	77	16	24.28	3,630
Prim. Trav. Sta. No. 105 S, Burke (previously described).....	38	47	42.91	77	16	12.05	1,376

Magnetic declination, 6° 01' W.

From point near Lewis Chapel to Cone Creek.

Lewis Chapel crossroad, 50 feet southwest of (previously described).....	38	41	13.94	77	12	31.73	.....
Prim. Trav. Sta. No. 97 B, at road fork, 8 feet west of W. D. Dean's mail box, in top of concrete post; tablet stamped "28 B".....	38	40	07.50	77	11	14.02	9,119
Prim. Trav. Sta. No. 98 B, 100 feet east of house, at road turn, in tree root; copper nail.....	38	39	36.70	77	11	10.28	3,131
Prim. Trav. Sta. No. 99 B, at road fork, 30 feet north of intersection; copper nail in stump.....	38	39	20.94	77	11	12.59	1,604
Prim. Trav. Sta. No. 100 B, at road fork, near end of road, 150 feet from shore line, in top of concrete post; tablet stamped "29 B".....	38	39	08.65	77	11	37.89	2,362

**CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN,
AND WASHINGTON QUADRANGLES—Continued.**

From Edsall to Franconia.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Fect.
Prim. Trav. Sta. No. 99 S (previously described).....	38 47 42.39	77 09 28.64	.....
Prim. Trav. Sta. No. 101 B, 130 feet south of P. C. sign, 0.5 mile north of Franconia station, northbound track, in tree; copper nail.....	38 47 22.48	77 09 18.67	2,168
Prim. Trav. Sta. No. 102 B, 25 feet southwest of section house 289, northbound track, in tree; copper nail.....	38 47 04.87	77 09 21.67	1,800
Prim. Trav. Sta. No. 24 B, Franconia station (previously described).....	38 46 46.39	77 09 24.95	1,889

Magnetic declination, 5° 00' W.

From point 2 miles west of Franconia northwest to Southern Ry.

Prim. Trav. Sta. No. 78 B (previously described).....	38 46 42.04	77 11 26.33	.....
Prim. Trav. Sta. No. 103 B, 25 feet east of intersection of T road, in stump; copper nail.....	38 46 56.67	77 11 55.76	2,766
Prim. Trav. Sta. No. 104 B, at intersection of road and telegraph line, in stump; copper nail.....	38 47 02.77	77 12 18.32	1,894
Prim. Trav. Sta. No. 124 B, 80 feet south of house at road banks, in pine root; copper nail.....	38 47 13.82	77 12 26.06	1,281
Prim. Trav. Sta. No. 125 B, at small creek, 10 feet east of center of road, in root; copper nail.....	38 47 21.38	77 12 33.47	968
Prim. Trav. Sta. No. 101 S (previously described).....	38 47 44.57	77 11 51.74	4,051

Magnetic declination, 5° 31' W.

From point 1 mile northwest of Pohick School to point 1.5 miles south of Burke.

Prim. Trav. Sta. No. 75 B (previously described).....	38 45 45.85	77 14 43.53	.....
Prim. Trav. Sta. No. 77 B, 1 mile northwest of Pohick School, in road fork, 120 feet east of mail boxes, in root of large oak tree; copper nail.....	38 45 58.39	77 15 09.94	2,445
Prim. Trav. Sta. No. 106 B, at crossroads, 15 feet south of main road, in stump; copper nail.....	38 46 18.93	77 15 47.07	3,600
Prim. Trav. Sta. No. 107 B, at road forks, 15 feet north of roads, in base of 12-inch oak tree; copper nail.....	38 46 33.98	77 16 07.50	2,220
Prim. Trav. Sta. No. 88 B, 1.5 miles south of Burke (previously described).....	38 46 37.09	77 16 33.48	2,081

Magnetic declination, 5° 44' W.

From point 1.3 miles west of Franconia west along old Fairfax Road.

Prim. Trav. Sta. No. 27 B (previously described).....	38 46 42.01	77 10 43.47	.....
Prim. Trav. Sta. No. 78 B, about 80 feet east of road forks, on south side of road, in root of pine tree; copper nail.....	38 46 42.04	77 11 26.33	3,399
Prim. Trav. Sta. No. 79 B, south side of road, on east bank, in root of large twin oak tree; copper nail.....	38 46 30.89	77 12 12.85	3,857
Prim. Trav. Sta. No. 80 B, on south side of road, in same stump as T. B. M. 292.1; copper nail.....	38 46 36.47	77 13 07.48	4,368
Prim. Trav. Sta. No. 81 B, and T. B. M. 323.5, on north side of road, in stump; copper nail.....	38 46 49.86	77 13 30.11	2,252
Prim. Trav. Sta. No. 121 B, intersection of Rolling Road and old Fairfax Road, in hub; copper nail.....	38 46 45.08	77 14 00.79	2,480
Prim. Trav. Sta. No. 60 B, was erroneously described as being at intersection of Rolling Road and old Fairfax Road. It is about 1,200 feet west, at intersection of second-class road with old Fairfax Road.....	38 46 41.53	77 14 15.47	1,220

Magnetic declination, 5° 35' W.

121166°—23—Bull. 709—29

CAMP HUMPHREYS, INCLUDING PARTS OF FAIRFAX, INDIAN HEAD, OCCOQUAN, AND WASHINGTON QUADRANGLES—Continued.

From intersection of old Fairfax Road and Rolling Road north to Ravensworth.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Prim. Trav. Sta. No. 121 B (previously described).....	38 46 45.08	77 14 00.79	.....
Prim. Trav. Sta. No. 122 B, 150 feet north of road fork, 10 feet west of center line of road, in hub; copper nail.....	38 47 04.51	77 14 17.05	2,354
Prim. Trav. Sta. No. 123 B, at crossroads, 15 feet west of center line of main road, in tree root; copper nail.....	38 47 18.89	77 14 26.43	1,637
Prim. Trav. Sta. No. 103 S (previously described).....	38 47 46.09	77 14 14.06	2,926

Magnetic declination, 5° 48' W.

From a point on Rolling Road 1.5 miles north of Pohick station east to Accotink station. (By D. S. Birkett in 1920.)

Prim. Trav. Sta. No. 53 B (previously described).....	38 44 32.10	77 12 43.23	.....
Prim. Trav. Sta. No. 126 B, northwest corner of field, 4 feet west of center of road, copper nail in stump.....	38 44 12.52	77 12 28.88	2,285
Prim. Trav. Sta. No. 127 B, 125 feet north of Accotink Creek, at road forks; copper nail in hub.....	38 43 59.75	77 12 05.55	2,259
Prim. Trav. Sta. No. 128 B, at road forks, edge of roads; copper nail in hub.....	38 43 51.48	77 12 00.12	944
Point on northbound track of Richmond, Fredericksburg & Potomac R. R., opposite tangent on Camp A. A. Humphreys R. R., School of Topography point, 1918 (previously described).....	38 44 06.12	77 11 12.90	4,027

From a point on Alexandria and Franconia road north via Bush Hill to crossing of Southern Ry. and Richmond, Fredericksburg & Potomac R. R.

Prim. Trav. Sta. No. 82 B (previously described).....	38 47 29.58	77 06 08.79	.....
Prim. Trav. Sta. No. 129 B, north edge of hill, about 600 feet northwest of brown frame house (Hadden place), west edge of private road, in root of oak tree; copper nail.....	38 47 52.23	77 06 07.74	2,293
Prim. Trav. Sta. No. 130 B, about 300 feet west of frame house, 40 feet north of creek, north edge of road; copper nail in hub.....	38 48 05.80	77 06 15.87	1,520
Cameron Run, 850 feet east of; aluminum tablet No. 54 (previously described).....	38 48 23.06	77 06 24.52	1,877

From Laurel Grove School east about 1 mile.

NOTE.—This line was not completed; there was no azimuth nor distance check, and the positions are preliminary.

Prim. Trav. Sta. No. 21 B (previously described).....	38 46 13.30	77 09 12.77	.....
Prim. Trav. Sta. No. 131 B, about 600 feet southeast of white frame house, in fork of roads; copper nail in hub.....	38 46 06.29	77 08 42.63	2,490
Station 1914, hub on east side of road.....	38 45 59.83	77 08 31.94	1,072

Magnetic declination, 5° 30' W.

From a point 0.5 mile east of Sideburn, south 1 mile, then west.

NOTE.—This line was unfinished; no check azimuth and no closure.

Prim. Trav. Sta. No. 108 S (previously described).....	38 47 51.06	77 18 06.68	.....
Prim. Trav. Sta. No. 132 B, 0.5 mile south of railroad crossing, top of hill, 12 feet east of road; copper nail in small stump.....	38 47 23.69	77 18 09.90	2,781
Prim. Trav. Sta. No. 133 B, T road east, 8 feet east of road, base of mail box; copper nail in hub.....	38 47 08.02	77 18 12.00	1,594
Prim. Trav. Sta. No. 134 B, T road north, 15 feet south on side of earth bank; copper nail in hub.....	38 46 47.44	77 18 14.59	2,092
Prim. Trav. Sta. No. 135 B, 20 feet west of T road south, on south side of main road; copper nail in root of stump.....	38 46 57.28	77 18 34.56	1,869

Magnetic declination, 5° 30' W.

CAPE HENRY QUADRANGLE.

Along highways near Broad Creek. (By F. J. McMaugh in 1917.)

Station.	Latitude.			Longitude.			Distance between stations.
Creek triangulation station of U. S. Coast and Geodetic Survey. On north bank of Eastern Branch of Elizabeth River, on lower point where Broad Creek enters, about 175 meters below east end of Norfolk Southern bridge over Broad Creek, on small grassy and high sandy point, marked by cement block, 8 by 8 by 24 inches, bearing brass plate with legend. Reference mark is a cement block, 8 by 8 by 24 inches, bearing brass plate with arrow, set on high ground straight down on north line of woods, distant, 19.916 M. on line 192° 51' 15" to right of line to station Broad.	°	'	"	°	'	"	Fect.
Ingleside station, road crossing, just east of.....	36	50	23.76	76	13	46.34	1,865
East end of trestle.....	36	50	38.6	76	14	25.8	1,705

North along Virginian Ry. near west border of quadrangle.

Tidewater Junction, intersection of Norfolk Southern R. R. with Virginian Ry., south and east rails.....	36	50	41.5	76	14	37.1	970
Road crossing.....	36	51	02.4	76	14	42.3	2,155
Road crossing, concrete boulevard to Virginia Beach.....	36	51	12.4	76	14	44.8	1,031
Road crossing.....	36	51	41.6	76	14	52.0	3,009
Intersection of Norfolk Southern R. R. to Cape Henry and Virginian Ry.....	36	51	47.8	76	14	53.5	647
Road crossing.....	36	52	02.2	76	14	57.1	1,478

Northeast along Norfolk Southern R. R.

Road crossing.....	36	51	55.4	76	14	31.2	1,531
Adkinson station, road crossing at, south rail joint opposite shelter house.....	36	52	00.5	76	14	25.2	1,106
Foxhall, road crossing east of.....	36	52	11.8	76	13	58.8	2,429
Halstead, switch point.....	36	52	27.5	76	13	21.8	3,306
Dennys station, road crossing east of.....	36	52	48.8	76	12	31.6	4,614
South rail, east bank of canal.....	36	52	50.7	76	12	27.2	409
Road crossing.....	36	52	57.1	76	12	12.0	1,392
Steel smoke stack, about 0.6 mile northeast of Burtons station.....	36	53	19.4	76	12	23.1	2,432
Burtens, road crossing at.....	36	53	08.2	76	11	46.0	3,225
Road crossing, northwest of white house with green shutters, brick chimney, picket fence to water bank, near point of curvature of railroad.....	36	53	19.6	76	11	19.0	2,477
Road crossing, T road junction, 30 feet south of south rail.....	36	53	23.7	76	11	04.1	1,280
Diamond Springs station, road crossing east of.....	36	53	25.9	76	10	50.8	1,100
Road crossing.....	36	53	31.9	76	10	14.6	3,004
Lake Smith, 50 feet east of shelter house, 15 feet south of railroad; iron post stamped "Prim. Trav. Sta. No. 1, 1917".....	36	53	35.7	76	09	53.5	1,753
East end of long trestle.....	36	53	38.7	76	09	42.8	922
East end of short trestle, 160 feet west of road crossing.....	36	53	40.6	76	09	35.7	612
Shelton, road crossing, 40 feet east of.....	36	53	57.6	76	08	47.1	4,099
Beechwood, road crossing, 40 feet east of.....	36	53	57.7	76	08	15.5	2,638
Road crossing, southeast of frame building on piles, 0.25 mile west of power house.....	36	54	06.1	76	07	32.7	3,581
Bayville, chimney on power house, U. S. Coast and Geodetic Survey triangulation station.....	36	54	08.4	76	07	13.5	1,577
Bayville, road crossing near.....	36	54	13.2	76	07	07.0	719
Buchanan siding, switch point.....	36	54	26.8	76	06	25.7	3,627
West abutment of long trestle.....	36	54	27.4	76	05	42.2	3,531
Lynnhaven Inlet, east abutment of trestle over.....	36	54	25.5	76	05	20.2	1,798
North rail opposite Third Street station.....	36	54	35.3	76	04	26.3	4,493
James Fishery, 20 feet north of railroad, 10 feet west of road crossing; iron post stamped "Prim. Trav. Sta. No. 2, 1917".....	36	54	42.6	76	03	51.7	2,906
Switch point, sand pit.....	36	54	53.7	76	03	16.8	3,050
Granite station.....	36	55	22.6	76	02	24.0	5,193
Fifty-second Street station.....	36	55	43.4	76	01	22.4	5,425
Forty-fifth Street station.....	36	55	39.8	76	00	54.8	2,271
Subtriangulation station.....	36	55	34.3	76	00	36.1	1,614
Cape Henry Lighthouse, U. S. Coast and Geodetic Survey.....	36	55	34.80	76	00	26.93	749
Cape Henry Lighthouse, 10 feet north and 12 feet east of entrance; iron post stamped "Prim. Trav. Sta. No. 3, 1917," Elev. 13'.....	36	55	35.02	76	00	26.73	27
Buchanan siding, about 2,400 feet northeast of, 250 feet north of railroad track, approximately 1,000 feet northeast of red bungalow, west of west end of drawbridge; Coast and Geodetic Survey tablet set in tile filled with concrete. (Point A.).....	36	54	32.8	76	05	57.3	.....
Lynnhaven Inlet, about 2,000 feet southwest of, low grassy point on west side of inlet, approximately 800 feet south of drawbridge. (Point B.).....	36	54	09.9	76	05	35.7	.....
Lynnhaven Inlet, triangle point about 1,600 feet northeast of east end of trestle over. (Point C.).....	36	54	35.5	76	05	05.1	.....

NOTE.—Points A, B, and C, were located by triangulation from traverse line.

CAPE HENRY QUADRANGLE—Continued.

South along railroad near west border of quadrangle. (By F. J. McMaugh in 1917.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Tidewater Junction, intersection of Norfolk Southern and Virginian railroads, south and east rails.....	36	50	41.5	76	14	37.1	.....
North end of trestle approach, Virginian Ry. bridge.....	36	50	18.6	76	14	36.3	2,312
Middle of draw.....	36	50	10.9	76	14	39.7	833
Center of concrete road crossing.....	36	49	43.4	76	14	59.6	3,220
Short trestle.....	36	46	26.0	76	14	52.4	.....
Road crossing.....	36	45	54.1	76	14	42.5	3,320
Watkins, point of switch at north end of siding.....	36	45	30.4	76	14	26.9	2,713
Watkins, road crossing, near south end of siding.....	36	45	12.3	76	14	07.1	2,443

East along highways near south border of quadrangle.

Butts, 1.3 miles northeast of, 30 feet west of road, in southeast corner of yard; iron post stamped "Prim. Trav. Sta. No. 6, 1917".....	36	45	14.1	76	12	27.0	.....
Intersection of wood road northwest near county line.....	36	46	08.0	76	12	15.2	5,528
Road crossing, northeast of colored church.....	36	46	49.4	76	11	32.7	5,436
Culvert crossing road, white house northeast.....	36	47	08.8	76	11	07.9	2,815
T road east.....	36	47	12.6	76	11	04.1	490
Barneys Corner (Thalia), crossroads at; N. 21° 30' W., 40 feet, to southeast corner of store porch; N. 55° E., 33 feet to southwest corner of store building; N. 82° W., 55 feet, to telephone pole.....	36	47	50.7	76	10	30.7	4,714
Church.....	36	47	24.4	76	09	55.7	3,894
Center of small bridge about 870 feet southeast of another bridge.....	36	47	00.1	76	09	32.9	3,086
T road west.....	36	46	52.4	76	09	32.2	778
T road east at two mail boxes.....	36	46	14.2	76	09	13.2	4,163
T road east, about 500 feet southeast of church, east of road, 450 feet southeast of yellow schoolhouse.....	36	46	01.2	76	09	02.7	1,568
Road south along bank of reservoir, 190 feet south of pumping station.....	36	45	37.7	76	08	34.5	3,303
Power house, 57.8 feet northeast of northeast corner of, 15.7 feet from 2 by 6 inch post at edge of road, 54 feet from 3-foot oak tree; iron post stamped "Prim. Trav. Sta. No. 7".....	36	45	37.2	76	08	31.8	223
T road.....	36	45	40.4	76	08	26.6	539
Intersection of roads, T road west, 30 feet southeast to corner of wire fence, 30 feet northwest to two pine trees.....	36	46	05.8	76	07	25.4	5,595
Opposite graveyard gate.....	36	45	38.0	76	07	06.4	3,207
Center of road at S. J. Sander's gate, 300 feet northwest of T road.....	36	45	33.1	76	06	58.4	820
Center of bridge.....	36	45	25.4	76	06	42.8	1,490
Small bridge, 35 feet northwest of, in line with center line of road northeast and east edge of road northwest; nail in stake.....	36	45	14.8	76	06	30.7	1,457
Intersection of farm road, at angle in main road.....	36	45	24.3	76	05	57.2	2,894
T road west, at center of north and south road, 40 feet north of bridge over ditch, 45 feet south of mail box 32, 4 feet east of east edge of grass triangle.....	36	45	35.6	76	05	32.9	2,279
T road west.....	36	45	55.6	76	05	36.4	2,048
Road fork, 10 feet east of wire fence, 35 feet southwest of pine tree, in center of grass triangle, in line with north edge of road east.....	36	46	26.8	76	05	41.9	3,182

Southeast along Norfolk Southern R. R. (Currituck Branch).

Land station, road crossing, east rail.....	36	46	44.2	76	05	07.6	3,307
Land station, 150 feet south of, 50 feet west of road crossing, at southeast corner of yard, 5 feet west and 5 feet north of fence intersection; iron post stamped "Prim. Trav. Sta. 7".....	36	46	44.1	76	05	08.1	49
East rail opposite milepost (M. 15. N. 13).....	36	46	22.7	76	04	42.5	3,004
Road crossing.....	36	46	19.4	76	04	38.7	453
Road crossing, 360 feet northwest of house east of track.....	36	46	03.3	76	04	20.0	2,224
Road crossing.....	36	45	57.2	76	04	12.9	850
Road crossing, about 80 feet northwest of milepost (M. 14. N. 14). Princess Anne, road crossing at, point on east rail, 46 feet from milepost (M. 13. N. 15).....	36	45	45.2	76	03	59.0	1,665
Princess Anne, in Mrs. Bateman's yard, 200 feet from railroad track; stake "Prim. Trav. Sta. No. 8".....	36	45	06.7	76	03	14.4	5,321
Road fork, near edge of north side of triangle formed by, 35 feet southwest of small fence post, in line with center of tree in yard, 12 feet south of road, 25 feet northwest of road, 30 feet northeast of road; stake.....	36	45	17.1	76	03	04.1	1,114
Center of larger and more westerly of two bridges.....	36	45	21.1	76	02	23.8	3,301
Culvert, at fork of road, 100 feet east of small white house, 117 feet southeast of T road north.....	36	45	15.1	76	02	03.2	1,784
Center line of road, opposite Mount Zion Church.....	36	45	16.3	76	01	39.6	1,922
Nimmo, road fork, 230 feet west of church, opposite telephone pole.....	36	45	34.8	76	01	02.4	3,558

CAPE HENRY QUADRANGLE—Continued.

Southeast along Norfolk Southern R. R.—Continued.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
T road west, north of store, south of three mail boxes.....	36	45	52.5	76	00	54.9	1,893
T road south.....	36	46	23.9	76	00	33.6	3,612
T road east at three mail boxes.....	36	46	29.8	76	00	25.0	924
T road west.....	36	46	56.4	76	00	06.1	3,094
Dam Neck Life Saving Station, 2 miles west of, intersection of T road east at Widgeon's store, on west side of north and south road; iron post stamped "Prim. Trav. Sta. No. 8" Elev. 13 feet.....	36	47	07.8	76	00	00.2	1,257

Magnetic declination for quadrangle, 5.6° W.

South on Ocean View electric railroad.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Road crossing.....	36	57	06.3	76	14	55.4	.....
Road crossing near railroad station.....	36	56	34.7	76	14	46.0	3,285
Pooles station, road crossing at.....	36	55	46.5	76	14	38.6	4,912
Oxford station, 40 feet southwest of road crossing at, 20 feet south of road west; iron post stamped "Prim. Trav. Sta. No. 5, 1917".....	36	54	52.6	76	14	30.8	5,487

East and south along highways to Camden Heights.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Metal culvert, center of road.....	36	54	57.3	76	14	09.1	1,823
T road north, center of.....	36	55	00.3	76	13	48.2	1,721
T road north at bend in road.....	36	54	54.6	76	13	15.5	2,716
Oxford station, 1.5 miles east of, crossroads at Water's store, 18 feet southeast to southwest corner and 20 feet northeast to northwest corner.....	36	54	54.6	76	12	44.3	2,534
T road north.....	36	54	37.4	76	12	32.2	1,992
T road northwest on road northeast and southwest.....	36	54	32.1	76	12	27.0	1,690
T road southeast.....	36	54	17.8	76	12	36.4	1,640
Bridge over channel connecting two reservoirs, north end of.....	36	54	12.7	76	12	26.9	928
Grass triangle, center of.....	36	53	58.2	76	12	05.6	2,269
T road east to house.....	36	53	33.5	76	12	21.1	2,795
Cement walk to water works, middle of.....	36	53	19.8	76	12	24.3	1,406
T road east.....	36	53	01.6	76	12	26.1	1,854
Canal bridge, north end of.....	35	52	53.3	76	12	29.7	886
Dennys station, on north rail opposite center of.....	36	52	48.6	76	12	32.1	512
Road crossing, east of Dennys station (previously located).....	36	52	48.8	76	12	31.6	40
Triangulation station near shore line, Ocean View (C. & G. S. station).....	36	57	02.7	76	14	42.2	.....

Magnetic declination for quadrangle, 5.5° W.

CHARLES CITY QUADRANGLE.

South along Chesapeake & Ohio Ry. and highways near east border of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Milepost No. 60, west bound track.....	37	26	13.6	77	01	08.7	.....
Providence Forge, road crossing at east end of station, east-bound track.....	37	26	26.8	77	02	21.9	6,053
Chickahominy River, south end of bridge over.....	37	25	56.2	77	02	16.0	3,132
Y road east.....	37	24	48.3	77	02	41.4	7,171
Road forks at abandoned schoolhouse, in line with T road west, center of road.....	37	24	32.4	77	02	47.3	1,677
Adams store, 0.5 mile southwest of, center of road forks.....	37	23	28.6	77	03	11.7	6,743
Second-class road east.....	37	22	54.0	77	02	56.1	3,717
Ruthville, center of crossroads.....	37	22	02.7	77	02	29.1	5,631
Manoah Church, in front of, center of road.....	37	22	39.5	77	01	09.6	7,417
Bimm's Hall, about 1 mile west of, on Ruthville road, at north- east corner of crossroads; iron post stamped "Prim. Trav. Sta. No. 54, 1916".....	37	22	22.9	77	00	18.0	4,492
Five Forks, center of triangle at.....	37	21	30.6	77	00	04.7	5,399
Providence Forge, T road southeast, just east of old mill.....	37	26	37.8	77	02	44.4	.....
Lane leading west to house.....	37	27	38.3	77	02	08.3	6,784
T road east and T lane west.....	37	28	12.2	77	02	00.4	3,487
Wooden culvert over small creek.....	37	29	17.4	77	02	18.7	6,763

CHARLES CITY QUADRANGLE—Continued.

West along highways near center of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Hopewell, center of road at top of rise at C. W. Jones's store.....	37	23	23.5	77	05	11.2	.....
Crossroads, at P. H. Rollison's mail box, No. 69.....	37	23	37.0	77	05	48.1	3,280
Ladd's store, T road west at.....	37	24	25.4	77	07	15.4	8,581
Roxburgh, about 3 miles south of, at southwest corner of old Samaria Church; iron post stamped "Prim. Trav. Sta. No. 55, 1916".....	37	25	08.2	77	08	18.9	6,708
Schoolhouse No. 5, center of road in front of.....	37	24	21.4	77	08	23.3	4,742
Road southeast at abandoned schoolhouse.....	37	23	40.9	77	08	33.8	4,187
Road west at old store building, at mail box No. 14.....	37	22	35.1	77	09	36.0	8,330
Lane south, 12 feet northwest to cedar tree at west edge of road. Wayside, 4-foot oak tree, on south edge of road, 35 feet north- west of Bimm's store.....	37	22	18.2	77	10	53.5	6,485
River road, at road east, center of triangle, at foot of hill to south. Malvern Hill post office, 0.5 mile southeast of, at schoolhouse, T road south.....	37	22	23.0	77	12	00.3	5,419
Malvern Hill post office, about 800 feet northwest of, road forks at road northeast.....	37	22	33.9	77	13	29.5	7,285
	37	22	44.4	77	14	05.5	3,099
	37	23	05.0	77	14	34.3	3,123

North along highways near west border of quadrangle.

T road west, 25 feet north to three mail boxes, on east side of road.	37	24	37.2	77	14	56.9	.....
Runnimeede stock farm, T road southeast at mail box for.....	37	25	33.5	77	14	27.7	6,161
Glendale, road forks at store.....	37	26	45.4	77	13	50.8	7,860
Road north, 30 feet west to E. L. Bates's mail box.....	37	27	04.9	77	12	48.9	5,370
Elko, railroad crossing just east of depot, eastbound track.....	37	28	21.0	77	12	44.2	7,705
Lone pine tree at northeast corner of road forks.....	37	29	05.2	77	12	45.3	4,480

Magnetic declination for east border of quadrangle, 5° 01' W.; for west border of quadrangle, 4° 37' W.; near center of quadrangle, 6° 18' W.

(By J. H. Wilson in 1916-17.)

River triangulation station, on south shore of Tar Bay, on River- view plantation, 0.25 mile below well-marked ruins of old pier on projection into the bay. Hog-tight wire fence runs north and south to and from river 16.58 meters below station. Marked by tile and iron pipe set in cement and standing 1.5 inches above ground.....	37	17	06.73	77	11	19.36	.....
Martha White's store, 575 feet east of, second-class T road.....	37	16	13.8	77	11	27.0	5,384
E. J. Graves's store, about 200 feet northeast of, center of road forks.....	37	15	43.7	77	13	06.1	8,572
Road south, at 7 mail boxes on a wheel.....	37	15	49.1	77	13	53.8	3,895
Gee post office, center of crossroads at.....	37	16	03.0	77	14	42.5	4,177

Magnetic declination near southwest corner of quadrangle, 4° 33' W.

Northwest along highways near south border of quadrangle. (By Olinus Smith in 1917.)

Garysville, 0.60 mile northwest of, centre of bridge over Red Point Creek.....	37	15	10.7	77	09	30.8	.....
Red Point Creek, 0.60 mile northwest of, T road east.....	37	15	38.1	77	09	56.0	3,434
Red Point Creek, 1.60 miles northwest of, T road east.....	37	16	11.6	77	10	48.5	5,437
Red Point Creek, 2.20 miles northwest of, T road north.....	37	16	13.85	77	11	26.98	3,126
Closure error.....			1.44			2.68	

Magnetic declination near south border of quadrangle, 5° 50' W.

DINWIDDIE QUADRANGLE.

East along Seaboard Air Line R. R. near south border of quadrangle. (By J. C. Fales in 1918.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Milepost 45, about 1,000 feet northeast of, on southeast side of right of way; iron post stamped "Prim. Trav. Sta. No. 4, 1918"	37 00 35.3	77 41 04.0	.....
Road crossing.....	37 01 03.3	77 40 45.8	3,192
Timber trestle, south end of.....	37 01 11.5	77 40 38.5	1,022
Plank Road crossing, at center line of, east rail.....	37 01 42.4	77 39 42.9	5,480
Milepost 42, east rail opposite.....	37 02 10.9	77 38 52.5	5,007
Dewitt station, opposite door of white waiting room, east rail....	37 02 26.3	77 38 33.0	2,213
Road crossing, east rail.....	37 03 06.4	77 37 41.1	5,852
Butterworth station, opposite door of white waiting room, east rail.....	37 03 15.0	77 37 22.6	1,734
Milepost 40, 350 feet north of, 40 feet east of track; iron post stamped "Prim. Trav. Sta. No. 5, 1918".....	37 03 19.8	77 37 10.8	1,070

Along logging railroad near south border of quadrangle.

Railroad log dump across mill pond, northeast corner of.....	37 02 59.1	77 37 13.4	2,110
Timber trestle, north end of.....	37 02 13.3	77 36 45.2	5,163
Road crossing, road west to Dewitt.....	37 01 47.4	77 36 27.5	2,989

Along highways near south border of quadrangle.

Road fork, at north edge of, two 8-inch yellow-pine trees.....	37 01 24.3	77 35 00.9	7,399
T road, at north point of Y, three 12-inch pine trees, in inclosed triangle.....	37 01 09.1	77 34 28.7	3,031
Logging railroad crossing, 50 feet south of two unpainted station buildings.....	37 00 59.6	77 33 54.5	2,936

Along logging railroad near south border of quadrangle.

Point of switch whence track leads northeast.....	37 01 18.3	77 33 35.1	2,461
Toe of switch whence track leads south.....	37 02 04.2	77 32 44.3	6,209
Crossing of "Flatfoot Road" and logging railroad of Camp Manufacturing Co.....	37 02 05.3	77 32 00.0	3,598

Along highways near south border of quadrangle.

Two-story gray house of H. L. Reeves, opposite front door of, road.....	37 01 41.0	77 31 28.6	3,542
T road west to house, road, opposite Fitzhugh McCoy's mail box..	37 01 11.6	77 30 52.6	4,166
Road, opposite three mail boxes on south side of road.....	37 00 56.8	77 30 34.1	2,119

Magnetic declination for south part of quadrangle, 4° 10' W.

DISPUTANTA QUADRANGLE.

In northwest corner of quadrangle. (By J. H. Wilson in 1916-17.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Gee post office, 1.4 miles southeast of, at road north, 40 feet northeast of J. Krumel's mail box on north side of road.....	37 14 57.5	77 14 14.4	.....
Prince George courthouse, about 3 miles northeast of, 36 feet west of northwest corner of B. M. Harris's store, at road forks, at foot of mail box; iron post stamped "Prim. Trav. Sta. No. 57, 1917"	37 14 28.8	77 14 51.5	4,179

DISPUTANTA QUADRANGLE—Continued.

Southeast along Norfolk & Western Ry. in south part of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Fect.
Disputanta, 4,000 feet northwest of depot, at overhead road crossing, on railroad embankment, on north side of track, 15 feet south of northeast corner of concrete abutment; iron post stamped "Prim. Trav. Sta. No. 58, 1917".....	37	07	57.2	77	14	33.0	
Disputanta, road crossing at depot, middle track.....	37	07	31.5	77	13	53.8	4,100
Milepost 68, center of middle track.....	37	07	04.3	77	13	11.9	4,370
Road crossing, 2,150 feet southeast of milepost 67, west-bound track.....	37	06	18.3	77	12	01.1	7,385
Milepost 66, west-bound track.....	37	05	58.5	77	11	30.5	3,184
Milepost 65, west-bound track.....	37	05	27.0	77	10	42.1	5,050
Overhead road crossing, west-bound track directly under, 2,075 feet northwest of milepost 63.....	37	04	34.2	77	09	21.0	8,470
Milepost 62, west-bound track.....	37	03	47.5	77	08	09.2	7,495
Milepost 61, west-bound track.....	37	03	13.7	77	07	17.2	5,430
Milepost 60, west-bound track.....	37	02	40.3	77	06	25.8	5,365
Waverly, junction of Norfolk & Western and Southern (narrow gauge) railroads, west-bound track of Norfolk & Western.....	37	02	14.6	77	05	46.4	4,121
Waverly, road crossing, just east of depot, west-bound track.....	37	02	10.0	77	05	39.2	4,740
Waverly, 4,070 feet southeast of, road crossing, west-bound track.....	37	01	44.6	77	05	00.3	4,070
Road crossing, 770 feet southeast of milepost 57, west-bound track.....	37	00	57.8	77	03	48.5	7,500
Milepost 56, west-bound track.....	37	00	29.7	77	03	05.4	4,510
Crossroads, 5 miles southeast of Waverly, and 4 miles northwest of Wakefield.....	37	00	11.2	77	01	04.7	
Crossroads, in southeast corner of; iron post stamped "Prim. Trav. Sta. No. 132, 1904" (Bull. 245, p. 146).....	37	00	47.5	76	59	39.6	7,818

West along Southern Ry. (narrow gauge) and highways in south part of quadrangle.

Waverly junction.....	37	02	14.57	77	05	46.35	
Waverly, 1 mile southwest of, at east-west road crossing, 420 feet northeast of sign reading "Railroad crossing 1 mile".....	37	01	36.7	77	06	23.7	
Road crossing, 1,125 feet northeast of milepost 31.....	37	00	56.6	77	07	03.2	5,170
Newville Church, 550 feet west of crossroads.....	37	00	45.8	77	10	37.7	
Mailbox in front of Dr. Neblet's residence.....	37	00	11.9	77	12	36.8	10,252
Neblet's mill, just below, center of bridge over Jones's swamp.....	37	00	02.4	77	13	04.9	2,471

North along highways near west border of quadrangle.

J. D. Grammer's store (old Elms p. o.), in front of, center of road.....	37	03	07.0	77	14	48.8	
Joseph's swamp, center of bridge over, 200 feet southwest of road forks, at road north to Disputanta.....	37	03	36.1	77	13	54.1	5,323
T road south, about 200 feet south of 1-story white house with green trimmings.....	37	04	57.7	77	13	39.1	8,344
Warwick Swamp, center of bridge over.....	37	05	32.9	77	13	39.8	3,564
Mail box 68, 1 mile south of Disputanta, center of road at.....	37	06	27.2	77	13	32.2	5,536
Station 759.....	37	07	31.49	77	13	53.75	6,730

Magnetic declination near northwest corner of quadrangle, 4° 02' W.; near south border of quadrangle, 2° 12' W.; near west border of quadrangle, 4° 11' W.

North along highways through center of quadrangle. (By Olinus Smith in 1917.)

Waverly, 4.50 miles west of, at Milton siding, under overhead road crossing on Norfolk & Western Ry., center of west-bound track.....	37	04	34.25	77	09	20.99	
Milton siding, 1.50 miles northeast of, intersection of Baxter and Cabin Point roads, crossroads.....	37	05	24.2	77	08	35.3	6,249
Blackwater River, bridge over, center of truss.....	37	06	06.1	77	08	35.6	4,236
Blackwater River, 0.70 mile north of, T road west.....	37	06	41.8	77	08	29.4	3,639
Blackwater River, 1.40 miles north of, T road.....	37	07	29.7	77	08	13.9	4,991
Otterdam Swamp, 190 feet northeast of, road fork.....	37	08	06.1	77	07	50.5	4,132
Otterdam Swamp, 1.00 mile north of, 14.7 feet northeast of nail in oak sapling, 18.4 feet southeast of nail in hickory sapling (instrument station No. 50).....	37	08	58.2	77	07	41.0	5,317
Otterdam Swamp, 1.40 miles north of, at branch crossing, center of road.....	37	09	17.2	77	07	51.1	2,088
T. C. Hobbs's mail box (No. 46), at road forks.....	37	09	34.1	77	07	56.6	1,758
Hugh Williams's farm, 20 feet south of T road east, 13 feet west of center of road, inside of fence; iron post stamped "Prim. Trav. Sta. No. 1, 1917".....	37	09	57.2	77	08	36.9	4,022
Wards Creek, center of road at.....	37	10	20.3	77	07	54.8	4,118

DISPUTANTA QUADANGLE—Continued.

North along highways through center of quadrangle. (By Olinus Smith in 1917.)—Continued.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Wards Creek, 1.20 miles northwest of, at mail boxes 16 and 17; center of crossroads.....	37 11 11.0	77 08 13.1	5,340
Burrows's store, intersection of Pole Run Road and road north to Garysville.....	37 11 07.2	77 08 51.5	3,139
Burrows's store, 1.70 miles northeast of, T road west.....	37 12 38.8	77 08 38.2	9,313
Burrows's store, 3 miles northeast of, intersection of road to Newville and road to Burrowsville, T road.....	37 13 26.8	77 07 56.7	5,892
Garysville, 1 mile southeast of, T road east.....	37 14 27.4	77 08 19.3	6,395
Garysville, 400 feet north of Burrows's store, at old mill, at road fork east, in center of triangle; iron post stamped "Prim. Trav. Sta. No. 2, 1917".....	37 14 53.7	77 09 01.8	4,345

Magnetic declination through center of quadrangle north-south, 5° 50' W.

DOSWELL QUADANGLE.

East along highways near south border of quadrangle. (By E. L. McNair in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Ashland, 1 miles southwest of, near entrance to Maplewood Farm, in line with road toward Ashland, 20 feet west of north and south road, 15 feet south of driveway to farm, 30 feet east of southern one of two large brick monuments on either side of driveway at corner of field; iron post stamped "Prim. Trav. Sta. No. 29, 1916".....	37 45 10.2	77 29 51.4	.....
Ashland station, about 400 feet south of, street crossing Richmond, Fredericksburg & Potomac R. R.; center of double track.....	37 45 32.4	77 28 50.1	5,413
T road south.....	37 45 35.4	77 27 29.5	6,479
Road forks.....	37 45 42.1	77 26 44.8	3,652
Road forks, road southwest to Richmond.....	37 45 03.3	77 24 22.0	12,125
Second-class road northwest, at angle in main road.....	37 45 26.0	77 23 58.2	2,994
Blanton flag station, road crossing, Chesapeake & Ohio Ry. track.....	37 45 39.7	77 23 01.0	4,794
Crossroads, near Hanover schoolhouse and church.....	37 45 54.3	77 22 11.8	4,218
Hanover Courthouse (built in 1735), 130 feet in front of, 25 feet northwest of gate at main entrance to courthouse grounds, 1.5 feet outside of iron fence, 110 feet south from soldiers' monument, across road from hotel; iron post stamped "Prim. Trav. Sta. No. 30, 1916".....	37 45 46.7	77 21 59.8	1,239
Road forks, road south.....	37 45 04.8	77 21 20.3	5,294
Etna Mills post office, crossroads at (tie point).....	37 45 56.6	77 16 00.0	.....

Along highways diagonally east to west through south part of north half of quadrangle.

Road forks.....	37 52 37.3	77 15 00.2	.....
T road (private) at mail box.....	37 52 49.2	77 15 58.3	4,809
Forks of road about 500 feet west of brick house.....	37 52 36.4	77 17 08.9	5,813
T road west, second-class road south.....	37 52 27.3	77 17 19.1	1,227
Road forks, west end of grass triangle at, near old schoolhouse.....	37 51 41.6	77 18 50.6	8,675
T road corners, roads north, south, and east.....	37 51 43.2	77 19 49.7	4,745
Road forks, T road north.....	37 51 20.8	77 20 42.3	4,789
Road forks, T road north.....	37 51 19.0	77 21 09.4	2,181
Doswell, about 7 miles east of, 6 miles north of Hanover Courthouse, on old Washington-Richmond stage road, 20 feet west of center of road, in line with road east to Point Eastern, about 400 feet north of old Needwood Tavern; iron post stamped "Prim. Trav. Sta. No. 35, 1916".....	37 50 54.0	77 22 08.9	5,404
Road forks, road northeast.....	37 51 37.7	77 22 44.3	5,255
T road south, private road.....	37 51 30.3	77 23 45.4	4,956
Road forks, private road northeast.....	37 51 18.6	77 24 20.4	3,054
T road south.....	37 51 00.0	77 25 17.1	4,916
Pamunkey River, center of truss on bridge over, line between Caroline and Hanover counties.....	37 51 01.1	77 25 40.0	1,837
Garnett flag station, on Chesapeake & Ohio Ry., public-road crossing, railroad track.....	37 50 54.6	77 26 39.6	4,826
Doswell, intersection of Richmond, Fredericksburg & Potomac and Chesapeake & Ohio railroad tracks at.....	37 51 33.6	77 27 29.8	5,639
Doswell post office, 0.75 mile west of, 20 feet north and 25 feet west of intersection of crossroads, on bank at edge of woods, south of Doswell School; iron post stamped "Prim. Trav. Sta. No. 36, 1916".....	37 51 37.6	77 27 54.3	2,003
Crossroads.....	37 51 33.6	77 28 39.6	3,654

DOSWELL QUADRANGLE—Continued.

Along highways near west border in southwest corner of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Road forks.....	37 46 00.4	77 29 49.6	.....
Crossroads.....	37 45 36.8	77 29 53.2	2,404
Prim. Trav. Sta. No. 29.....	37 45 10.2	77 29 51.4	2,699

Along highways near east border of quadrangle (south two-thirds of quadrangle).

Primary Traverse Station No. 34.....	37 52 01.1	77 14 49.0	.....
Road forks.....	37 50 59.4	77 15 46.0	.....
Center of small wooden bridge over creek.....	37 50 47.0	77 15 31.0	1,730
Road forks, south end of triangle at.....	37 50 27.9	77 15 24.4	1,998
Center of bridge over small creek.....	37 49 49.8	77 15 32.7	3,901
Road forks, point is in line with roads east and south.....	37 49 38.8	77 15 20.9	1,436
T road northwest.....	37 49 05.2	77 16 00.2	4,633
Mangohick, crossroads at.....	37 48 35.6	77 16 24.9	3,580
Road forks 20 feet west of oak tree at north end of triangle formed by roads, in line with road east.....	37 48 30.4	77 15 49.5	2,888
Hebron Church, T road south in front of.....	37 48 01.2	77 15 38.6	3,069
Road forks.....	37 47 40.0	77 15 26.2	2,368
T road east.....	37 46 52.1	77 15 43.9	5,039
Etna Mills post office, crossroads at.....	37 45 56.6	77 16 00.0	5,754

Magnetic declination for south border of quadrangle, 5° 05' W.; for south half of quadrangle, 5° 10' W.; for southwest corner of triangle, 5° 00' W.; for east border (south two-thirds) of quadrangle, 4° 50' W.

North along highways and railroad near west border of north half of quadrangle.

Doswell station, intersection of Richmond, Fredericksburg & Potomac and Chesapeake & Ohio railroad tracks.....	37 51 33.6	77 27 29.8	.....
Doswell station, 0.75 mile north of, at north end of long siding, center of double track.....	37 52 12.0	77 27 33.2	.....
Milepost 25, Richmond, Fredericksburg & Potomac R. R., center of double track opposite.....	37 52 40.2	77 27 35.7	2,865
North Anna bridge, center of.....	37 53 18.3	77 27 43.5	3,904
Richmond, Fredericksburg & Potomac R. R., under overhead wagon bridge, center of track.....	37 53 54.1	77 27 53.7	3,711
Richmond, Fredericksburg & Potomac R. R., under overhead concrete wagon bridge, center of track.....	37 55 42.1	77 27 21.9	11,225
Ruther Glen, about 30 feet northeast of corner of station, 30 feet northwest of center of track, in section-house yard, just inside corner of fence; iron post stamped "Prim. Trav. Sta. No. 37, 1916".....	37 55 45.7	77 27 14.4	699
Overhead bridge, center of Richmond, Fredericksburg & Potomac R. R. track under.....	37 56 42.3	77 26 40.2	6,346
Coleman flag station, on Richmond, Fredericksburg & Potomac R. R., road crossing; center of track.....	37 57 33.2	77 25 47.8	6,643
George flag station, on Richmond, Fredericksburg & Potomac R. R., center of crossing at.....	37 57 20.2	77 24 03.6	8,453
Mattaponi River, center of iron girder bridge over.....	37 57 21.7	77 23 14.4	3,942
Penola station, public-road crossing at.....	37 57 26.4	77 22 15.2	4,772
Road forks, second-class road northeast.....	37 58 07.4	77 22 54.4	5,204
Crossroads.....	37 58 24.3	77 23 14.1	2,328
Crossroads, second class.....	37 58 45.2	77 24 26.9	6,197
Crossroads, second class.....	37 59 20.3	77 24 48.6	3,953
Penola, 3.75 miles northwest of, near forks of road south to Ruther Glen, 20 feet west of road, 15 feet north of shed; copper nail in root of locust tree, shed painted U. S. B. M. 20".....	37 59 28.6	77 25 04.1	1,497
Road forks, 20 feet east of large oak tree.....	37 59 52.6	77 25 04.1	2,434

Along highways near north border of quadrangle (spur line).

Balty post office and store, 50 feet southwest of, 50 feet west of road southeast, 20 feet north of east and west road, on top of bank; iron post stamped "Prim. Trav. Sta. No. 38, 1916".....	37 59 51.9	77 26 45.0
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Along highways near north border of quadrangle (main line).

Picadee Road Forks, road.....	37 59 57.4	77 19 17.1
Road forks.....	37 59 49.3	77 19 00.0	1,599
Road forks.....	37 59 06.7	77 17 56.8	6,648
Road forks.....	37 59 07.5	77 17 07.3	3,960
Road forks, second-class road northwest.....	37 59 20.0	77 16 24.8	3,632

Magnetic declination near west border of quadrangle, 5° 20' W.; near north border of quadrangle, 5° 20' W.

HOLLAND QUADRANGLE.

Northwest along Virginian Ry. across northeast corner of quadrangle. (By J. J. Charters in 1918.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Boaz, road crossing.....	36	44	48.7	76	45	43.5	.....
Boaz, 74 feet south of southeast corner of station, at edge of small growth of cedar and pine trees; iron post stamped "Prim. Trav. Sta. No. 6, 1918 C".....	36	44	49.1	76	45	54.5	894
Opposite milepost 35.....	36	44	59.6	76	47	09.9	6,232

South along highways near east border of quadrangle. (By J. J. Phelan in 1918.)

Road crossing, 100 feet east of milepost 28, south rail.....	36	41	10.0	76	45	14.5	.....
Road crossing, south rail.....	36	40	53.4	76	46	33.1	6,619
Holland, crossing of Main Street, south rail of main line, 5 feet west of center of road.....	36	40	49.2	76	46	53.0	1,671
Junction of Drumhill and Holland and Franklin roads, north edge of Franklin road.....	36	40	26.6	76	47	11.5	2,750
T road east.....	36	38	33.7	76	47	03.4	11,442
Center of triangle formed by junction of three roads.....	36	38	25.2	76	47	01.2	882
East side of road, 15 feet north of Bush railing at north end of of bridge, 5 feet from edge of approach to bridge.....	36	37	54.5	76	46	37.8	3,655
South corner of square formed by intersection of roads, 10 feet from corner fence post.....	36	37	35.4	76	46	20.0	2,410
Center of junction of three roads from Holy Neck, Holland, and Drumhill.....	36	36	45.6	76	46	51.2	5,646
Holly Neck School, 340 feet east of first T road east of 6 feet from well at Mr. Hayes's house; iron post stamped "Prim. Trav. Sta. No. 6 P, 1918".....	36	36	47.6	76	46	47.6	340
T road north.....	36	36	54.2	76	45	31.3	6,253
T road junction, 25 feet from corner of picket fence.....	36	36	55.1	76	45	20.5	874
Center of culvert.....	36	36	31.9	76	45	11.9	2,447
Center of small culvert.....	36	35	43.2	76	45	16.0	4,945
Center of intersection of three roads, 12 feet from corner fence post on west, 65 feet from mail box 42.....	36	35	10.9	76	45	39.7	3,802
East end of bridge.....	36	34	36.6	76	45	58.4	3,797
Center of crossroads, roads running north and south and east and west.....	36	34	11.2	76	45	58.9	2,575
Somerton, T road, 12 feet from Longton's mail box.....	36	34	06.9	76	45	04.2	4,404
Center of T road southeast, 30 feet from a point 6 feet north of mail box 26.....	36	33	36.5	76	45	04.1	3,080

West along Southern Ry.

East end of bridge, south rail.....	36	40	41.8	76	47	29.8	3,096
Road crossing, south rail.....	36	40	39.6	76	47	53.6	1,951
Crossing of road to Cleopus, south rail.....	36	40	37.1	76	48	39.7	3,760
Elwood, 136 feet west of east end of station, road crossing, south rail.....	36	40	34.4	76	49	28.2	3,960
East end of bridge.....	36	40	33.2	76	49	51.5	1,906
Road crossing, south rail.....	36	40	31.5	76	50	21.7	2,466
Road crossing, south rail.....	36	40	30.3	76	50	43.4	1,767
Road crossing, 82 feet west of milepost 34, south rail.....	36	40	27.5	76	51	40.5	4,663
Milepost 35, south rail opposite.....	36	40	33.9	76	52	43.7	5,190
Lees Mill, 69 feet east of east end of station, road crossing, south rail.....	36	40	41.4	76	53	35.5	4,291
Road crossing, south rail.....	36	40	55.0	76	54	11.0	3,204
East end of viaduct over Seaboard Air Line Ry., north rail.....	36	41	05.3	76	54	33.6	2,116
Road crossing, north rail.....	36	40	55.9	76	55	09.2	3,055
Franklin, point of frog of switch from Southern Ry. to "joint account" track to Seaboard Air Line Ry.....	36	40	51.6	76	55	21.8	1,109
Road crossing, south rail.....	36	40	55.4	76	55	47.8	2,158
Road crossing, south rail.....	36	41	05.5	76	56	33.0	3,817
Isaac, 49 feet southeast of east end of station, road crossing, south rail.....	36	41	40.3	76	57	57.5	7,729
East end of bridge A. D. 41.2, north rail.....	36	42	01.7	76	58	56.6	5,278
Road crossing.....	36	42	01.3	76	59	05.1	689
East end of bridge 41.7, north rail.....	36	42	00.6	76	59	29.1	1,956

Magnetic declination for east border of quadrangle, 4.3° W.

HOLLAND QUADRANGLE—Continued.

Northeast along Seaboard Air Line Ry. (By J. J. Phelan in 1918.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Delaware, about 1,500 feet east of station, at road crossing; north rail.....	36 39 01.5	76 59 50.9	.....
Road crossing, north rail.....	36 39 12.5	76 59 14.1	3,194
West end of stone culvert, north rail.....	36 39 17.2	76 59 00.2	1,231
Road crossing, 477 feet west of milepost 40, north rail.....	36 39 30.8	76 58 20.2	3,544
Opposite milepost 39, north rail.....	36 39 55.7	76 57 07.4	6,444
Road crossing.....	36 40 19.6	76 55 57.3	6,203
Franklin, High Street, 35 feet north of main line of Seaboard Air Line Ry., 3 feet west of west side of walk; iron post stamped "Prim. Trav. Sta. No. 7, 1918 P".....	36 40 31.7	76 55 28.1	2,675
Franklin, intersection of Fourth Avenue and High Street.....	36 40 40.0	76 55 34.4	985
Franklin, 4 feet east of east end of Southern Ry. station, south rail.....	36 40 52.4	76 55 29.2	1,322

South along highways near center of quadrangle.

Elwood, center of road crossing at, south rail.....	36 40 34.4	76 49 28.2	.....
Crossroads, 10 feet northwest from corner fence post, on edge of road south.....	36 40 17.2	76 49 15.7	2,014
T road.....	36 39 45.7	76 49 49.7	4,221
Road fork, center of Holland-Franklin road, in line with road to Elwood.....	36 39 20.2	76 50 27.2	3,997
Crossroads, Franklin-Holy Neck and Holland-Murfreesboro roads, 6 feet southwest of.....	36 39 04.9	76 51 01.4	3,200
Center of pipe culvert.....	36 38 42.9	76 51 26.4	3,020
T road southeast.....	36 38 26.7	76 51 47.4	2,372
Center of pipe culvert under road.....	36 38 07.1	76 52 04.6	2,430
T road north.....	36 37 07.1	76 52 10.6	6,083
Angle in road at point where Cleopus road leaves Factoryville-Suffolk road.....	36 36 40.6	76 52 12.3	2,685
Center of small culvert at edge of field.....	36 36 25.3	76 51 58.4	1,916
T road south.....	36 35 53.8	76 50 20.1	8,633
T road north, well traveled.....	36 35 49.8	76 50 06.1	1,255
Cleopus, center of small culvert, near a small sawmill which constitutes the town, point in road.....	36 35 38.4	76 49 53.4	1,550
Cleopus, 2,392 feet south of, west side of road, across from T road east through woods; iron post stamped "Prim. Trav. Sta. No. 8 P, 1918".....	36 35 19.1	76 49 36.5	2,392
Crossroads.....	36 35 12.4	76 49 30.2	850
Culvert under road.....	36 34 54.5	76 50 13.2	3,950
Center line of road, 10 feet in front of Carolina Johnson's mail box, in front of small one-story house with two large chimneys.....	36 34 49.9	76 50 24.2	1,010
Crossroads, 18 feet from Howell mail box.....	36 34 17.6	76 51 38.4	6,885
South edge of road, opposite east end of bridge over small river.....	36 33 24.5	76 51 41.4	5,374

North along highways near west border of quadrangle.

Isaac, 49 feet east of east end of station, road crossing.....	36 41 40.3	76 57 57.5	.....
Joyner's Church, at T road, 10 feet from milepost 2, in root of large oak tree; nail.....	36 42 05.9	76 57 42.0	2,886
T road northeast.....	36 42 49.0	76 57 59.4	4,583
T road northwest.....	36 43 02.0	76 57 58.6	1,323
Side of road, in front of meeting house, 50 feet across road from school.....	36 43 21.1	76 57 53.8	1,975
Center of crossroads.....	36 43 54.4	76 57 16.8	4,519
T road east.....	36 44 12.4	76 56 44.0	3,230
Center of small bridge, directly over center pier and 18 feet from north end.....	36 44 28.5	76 56 18.8	2,617

Southwest along highways from Delaware to Sunbeam.

Delaware, about 1 mile east of road crossing, north rail.....	36 39 12.5	76 59 14.1	.....
T road east of Franklin.....	36 38 05.3	76 58 53.4	6,994
T road west of Sunbeam.....	36 37 56.6	76 58 56.2	900

HOLLAND QUADRANGLE—Continued.

Southwest along highways from Delaware to Sanderson.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Monroe bridge over Nottoway River, 12 feet northeast of north-east end of approach to, on west edge of embankment.....	36 37 00.8	76 59 40.1	6,685
Monroe bridge over Nottoway River, 12 feet southwest of south-west end of, on south edge of embankment.....	36 35 53.5	76 59 44.7	830

Magnetic declination through center of quadrangle, 4.2° W.; in northwest part of quadrangle, 4.3° W.

North along highways near east border of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Holland, at first crossing on Main Street east of, 15 feet southwest of corner fence post, 27 feet northwest of corner fence post.....	36 40 59.6	76 46 37.2	.....
T road south.....	36 41 08.6	76 46 03.6	2,883
Holland, 1.5 miles northeast of, at T road south, 40 feet east of tree with sign reading "1½ miles to I. A. Lukes," on north edge of road.....	36 41 12.3	76 45 40.9	1,887
T road southwest, poorly traveled, in angle of.....	36 41 37.8	76 45 05.2	.....

Magnetic declination for north half of east border of quadrangle, 5.5° W.

EMPORIA QUADRANGLE.

Along Southern Ry. west from Emporia. (By J. C. Fales in 1918.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Water tank, north rail opposite spout of (distance from P. T. S. 6).....	36 41 41.5	77 32 40.1	.....
Milepost 75, center line of track opposite.....	36 42 18.8	77 33 38.6	6,070
Milepost 76, south rail opposite.....	36 42 48.6	77 34 33.1	5,365
Milepost 77, south rail opposite.....	36 43 17.8	77 35 27.1	5,296
Durand, south rail opposite shelter at.....	36 43 21.5	77 35 50.6	1,950
Milepost 78, south rail opposite.....	36 43 23.6	77 36 31.0	3,300
Crossing of Emporia-Lawrenceville road, 90 feet east of logging road switch; north rail at.....	36 43 35.1	77 37 14.9	3,750
Milepost 80, north rail opposite.....	36 44 15.7	77 38 19.6	6,076
Milepost 85, north rail opposite.....	36 44 56.7	77 42 52.2	.....
Racune depot, north rail opposite.....	36 44 53.8	77 43 21.1	2,371

South along highways near west border of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Moherrin River, north end of steel bridge across.....	36 42 50.0	77 44 57.5	.....
Crossing of Camp Manufacturing Co.'s railroad, joint in south rail at east edge of road.....	36 42 03.6	77 44 27.9	5,276
Timber bridge, 90 feet long, north end of.....	36 34 13.2	77 44 25.4	.....
Barley, T road west at J. F. Norwood's store.....	36 33 49.7	77 43 28.0	5,258

South along Atlantic Coast Line R. R. near east border of quadrangle. (By J. C. Fales in 1918.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Road crossing, 100 feet west of two unpainted unused buildings.....	36 44 23.2	77 30 06.3	.....
Milepost 60, east rail of south-bound track opposite.....	36 43 34.5	77 30 44.2	5,809
Semaphore 610, east rail of south-bound track opposite.....	36 42 57.0	77 31 11.4	4,400
Semaphore 621, east rail of south-bound track opposite.....	36 42 12.8	77 31 43.4	5,170
North Emporia, 400 feet north of intersection of Atlantic Coast Line and Southern railroads, 12 feet west of west rail of south-bound Atlantic Coast Line track, 20 feet south of semaphore on west side of track; iron post stamped "Prim. Trav. Sta. No. 6, 1918, 103".....	36 41 45.7	77 32 03.2	3,180
Emporia depot, 9 feet south of door of white waiting room, joint in west rail of north-bound track.....	36 41 32.3	77 32 12.9	1,572
Emporia, crossing of center line of Park Street.....	36 41 08.5	77 32 30.9	2,815
Milepost 64, center line of north-bound track opposite.....	36 40 41.6	77 32 46.6	3,009

EMPORIA QUADRANGLE—Continued.

South along Atlantic Coast Line R. R. near east border of quadrangle—Continued.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Fect.</i>
Milepost 65, west rail of northbound track opposite.....	36	39	50.4	77	33	03.4	5,350
Milepost 66, west rail of northbound track opposite.....	36	38	59.3	77	33	19.9	5,345
Emporia-Graysburg road, crossing of.....	36	38	22.2	77	33	28.8	3,817
Milepost 68, east rail of northbound track.....	36	37	17.0	77	33	10.0	6,770
Skippers post office, road crossing at.....	36	36	42.5	77	32	51.3	3,810
Milepost 70, east rail of southbound track.....	36	35	38.1	77	32	27.1	6,807
Milepost 71, east rail of southbound track.....	36	34	46.4	77	32	32.2	5,250
Dahlia Spur, road crossing at.....	36	33	59.2	77	32	16.5	4,944
Virginia-North Carolina State line, crossing of, on east rail.....	36	32	42.6	77	31	49.7	8,050

Magnetic declination for west border of quadrangle, 3° 50' W.

East along Southern Ry. from Emporia. (By H. J. Switzer in 1918.)

Emporia, intersection of west rail of west track of Atlantic Coast Line R. R. and north rail of Southern Ry.....	36	41	42.3	77	32	05.5	.....
Trestle, southwest end of.....	36	41	50.5	77	31	24.9	3,411
Milepost 72, north rail opposite.....	36	42	03.8	77	30	49.0	3,214
Culvert.....	36	42	09.7	77	30	09.0	3,314

Southwest from Emporia along highways through center of quadrangle. (By J. C. Fales in 1918.)

Road, opposite sign reading "2 miles to First National Bank".....	36	40	11.0	77	33	33.7	.....
Fork west.....	36	39	51.5	77	34	17.9	4,115
Road, opposite sign reading "4 miles to Everett's department store".....	36	39	19.0	77	35	33.0	6,956
Railroad crossing on Hitchcock Branch of Southern Ry.....	36	38	59.6	77	36	05.9	3,331
T road east through woods.....	36	38	31.1	77	36	37.0	3,847
T road to two-story unpainted house 300 feet east.....	36	37	48.4	77	37	27.4	5,973
Schoolhouse, new, light brown, 150 feet east of road, road opposite door of.....	36	37	20.3	77	37	43.5	3,139
Brink store and post office, crossroads at.....	36	37	04.7	77	38	05.2	2,378
T road west to unpainted house, 250 feet west.....	36	36	39.6	77	39	09.2	5,810
Brink, 1.75 miles southwest of in southwest corner of Fountain Creek Church yard, large unpainted building, 100 feet south of, 20 feet west of center line of road; iron post stamped "Prim. Trav. Sta. No. 14, 1918".....	36	36	30.2	77	39	44.7	3,056
T road east past dismantled house 300 feet east of road.....	36	36	06.3	77	41	05.1	6,986
T road west through woods.....	36	35	49.1	77	41	44.8	3,677
Two gate posts (no gate) at entrance to unpainted two-story house 150 feet west, west edge of road opposite.....	36	35	22.6	77	42	12.5	3,510
Barley, T road west at J. F. Norwood's store.....	36	33	49.7	77	43	28.0	11,228

East along highways from west border to center of quadrangle.

T road north past unpainted negro house.....	36	39	58.3	77	44	41.9	.....
Wagon gate to two-story white house of Bert Mitchell, road opposite.....	36	39	48.3	77	43	34.9	5,555
Ante, crossroads at.....	36	39	53.8	77	43	10.5	2,065
Large front gate to two-story white house of Cortle 200 feet south of road, south edge of road opposite.....	36	39	57.1	77	42	19.9	4,136
Harris store, at junction of Emporia-Lawrenceville road and road to Brink post office, at southwest corner of road T; iron post stamped "Prim. Trav. Sta. No. 26, 1918".....	36	40	05.1	77	41	17.2	5,170
Two gate posts 10 feet apart, at southeast corner of cornfield; point in road between.....	36	39	46.3	77	41	09.8	2,003
Large wooden gate at entrance to farm yard of J. H. Newsome.....	36	39	32.1	77	40	17.1	4,523
T road.....	36	39	11.2	77	39	21.7	4,986
Small stream.....	36	38	24.7	77	38	55.9	5,150
Timber bridge 100 feet by 16 feet, north end of, at center line.....	36	37	59.4	77	38	44.3	2,732
Brink store and post office, northeast corner of crossroads at; iron post stamped "Prim. Trav. Sta. No. 27, 1918".....	36	37	04.9	77	38	04.7	6,387

Magnetic declination for center of quadrangle, 3° 40' W.; for west part of quadrangle, 4° 00' W.

EMPORIA QUADRANGLE—Continued.

Along railroad and highways through center of quadrangle. (By H. J. Switzer in 1918.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Prim. Trav. Sta. No. 6, 1918, at Emporia (see other lists).....	36	41	45.70	77	32	03.20	.....
Emporia, Brunswick Avenue crossing, east rail of west track....	36	41	30.6	77	32	14.3	1,777
Road crossing, center of east track.....	36	40	55.7	77	32	39.6	4,084
Road crossing, west rail of west track.....	36	40	36.4	77	32	48.8	2,004
Road fork south.....	36	39	48.9	77	31	56.2	6,436
Road south.....	36	39	26.2	77	31	07.6	4,578

HEATHSVILLE QUADRANGLE.

The following geographic positions in the Heathsville quadrangle were determined by E. L. McNair in 1916 and are based on the positions of the U. S. Coast and Geodetic Survey stations Hack and Great Wicomico Lighthouse.

South along highways through center of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Hack triangulation station (U. S. C. & G. S.) This station apparently never had a permanent mark, as no description is given with its position. A few rotten pieces of timber on a slight knoll on bank of Potomac indicate approximate location. The highest part of knoll was taken as position. A local resident thought the original place was about 20 feet farther east, on ground about 4 feet lower. On account of the uncertain location it was decided to connect with Wicomico Lighthouse, a line to which starts from station 494.....	37	55	50.016	76	18	34.10	.....
T road corners.....	37	55	09.3	76	18	39.5	4,138
T road corners.....	37	54	49.6	76	20	05.9	7,208
Crossroads at Gonyon post office.....	37	54	13.6	76	20	18.9	3,779
Blundon's store, center of road in front of.....	37	53	34.5	76	20	48.2	4,605
Burgess store and post office, T road corners at, 15 feet north and 10 feet east of, 7 feet from fence line, in line with road southwesterly to ferry; iron post stamped "Prim. Trav. Sta. No. 7, 1916". (Destroyed in 1917).....	37	53	00.3	76	20	51.7	3,469
Forks of road.....	37	52	00.9	76	21	05.0	6,105
Glebe Point, north side of Great Wicomico River, 135 feet north-east of ferry landing, 10 feet east of roadway, in root of oak tree; copper nail, painted "U. S. B. M. 9".....	37	50	56.4	76	22	00.0	7,872
T road westerly, second class.....	37	49	48.4	76	23	11.7	8,968
T road corners.....	37	49	06.5	76	23	48.2	5,148
T road south.....	37	48	55.9	76	23	28.4	1,916
Road corners at Wicomico Church, in line with road south and road west, 10 feet southwest of corner of Snow's store.....	37	48	55.3	76	23	15.9	1,005
Second-class road east, at angle in main road.....	37	48	12.4	76	22	07.8	6,978
Crossroads.....	37	47	36.5	76	21	57.9	3,711
Center of small bridge.....	37	47	30.2	76	22	07.3	985
Forks of road, 120 feet from store door.....	37	46	23.6	76	22	05.6	6,740
Rehoboth Church (store and post office), 30 feet north and 20 feet east of T road corners at, on bank 35 feet southwest of corner of store building, 3 feet from telephone pole; iron post stamped "Prim. Trav. Sta. No. 8, 1916".....	37	46	03.8	76	21	52.2	2,269
T road west.....	37	45	32.4	76	22	08.7	3,446
T road corner.....	37	45	31.4	76	22	43.5	2,800
Small brook.....	37	45	46.3	76	23	44.8	5,153
Rehoboth Church, about 1.75 miles west and 0.7 mile south of along second-class road running west and joining Kilmarnock and Lancaster road, on north edge of road, house stands about 200 feet northeast, in root of small gum tree; copper nail, painted "U. S. B. M. 10".....	37	45	50.3	76	23	50.5	610

HEATHSVILLE QUADRANGLE—Continued.
Along highways near south border of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
T road north.....	37	46	03.3	76	24	16.6	2,472
Dim road north.....	37	46	03.6	76	24	31.8	1,222
Road forks.....	37	45	53.6	76	24	41.4	1,270
T road corners about 200 feet north of White Marsh Church, second-class road east.....	37	45	33.9	76	25	15.9	3,414
T road northeast.....	37	45	49.7	76	25	30.1	1,964
T road fork.....	37	46	04.9	76	26	48.0	6,441
T road south.....	37	46	04.3	76	27	22.6	2,780
Lancaster, on south side of Main Street, about 150 feet east of courthouse, opposite Lancaster Hotel, 20 feet south of road, 4 feet north of maple tree; iron post stamped "Prim. Trav. Sta. No. 9, 1916".....	37	46	10.6	76	27	54.6	2,650
Center of small bridge over creek.....	37	46	25.5	76	28	15.6	2,258
T road west, corner at.....	37	47	29.5	76	28	31.1	6,585
Lancaster, 2.5 miles west of, on Lancaster-Lively road, at forks of road leading to Lebanon church and Alfonso post office, 15 feet west of Lancaster-Lively road, 15 feet south of large oak tree in line with road running northwesterly; iron post stamped "Prim. Trav. Sta. No. 6, 1916".....	37	47	20.9	76	29	03.6	2,760
Small bridge over creek.....	37	47	34.4	76	29	27.3	2,340
Dim T road at old store building.....	37	47	50.3	76	29	59.7	3,063
Center of small wooden bridge over creek.....	37	52	36.9	76	29	41.8	(5,004)
T road east.....	37	53	11.6	76	29	56.8	3,715

Along highways diagonally through center of quadrangle from northwest to southeast.

Road east to camp grounds.....	37	54	03.7	76	29	23.4	4,906
T road corners near Heathsville new high school.....	37	55	20.1	76	29	04.7	7,874
Heathsville, on public square, 200 feet north of courthouse, 25 feet west of sidewalk; stone post with tablet in top marked "U. S. Coast and Geodetic Survey magnetic station".....	37	55	03.1	76	28	21.4	3,870
Second-class road southwest.....	37	54	56.4	76	27	25.3	4,552
T road north.....	37	55	02.3	76	26	43.9	3,366
T road south.....	37	54	57.3	76	26	21.9	1,838
Avalon post office, 150 feet south of, T road east, 15 feet west of road, 15 feet east of wagon shop, under mulberry tree; iron post stamped "Prim. Trav. Sta. No. 12, 1916".....	37	54	24.4	76	25	28.2	5,443
Road southwest.....	37	53	32.6	76	25	08.1	5,479
T road south.....	37	53	22.2	76	24	18.4	4,120
T road south.....	37	53	27.9	76	22	52.8	6,886
T road south.....	37	53	21.6	76	22	29.7	1,954
T road southeast.....	37	53	33.5	76	21	47.5	3,593
Burgess store and post office; Prim. Trav. Sta. No. 7, 1916, (Destroyed).....	37	53	00.0	76	20	51.7	5,591
T road north.....	37	52	52.2	76	20	08.1	3,600
T road south.....	37	52	51.1	76	20	01.5	535
T road south.....	37	52	06.9	76	18	38.0	8,060
Road forks.....	37	52	01.8	76	18	17.3	1,740
Lilian post office, T road corners at, road south to Fairport.....	37	51	41.4	76	18	03.1	2,355
Beverlyville post office, T road corners, in front of store.....	37	51	54.0	76	16	56.0	5,528
Road forks, south road to Reedville, southeasterly road to Fleeton.....	37	51	00.5	76	16	22.8	6,025
Road forks.....	37	50	17.5	76	15	46.4	5,249
Road west.....	37	49	49.5	76	16	03.5	3,146
Great Wicomico Lighthouse (U. S. Coast & Geodetic Survey).....	37	48	15.38	76	16	04.32	9,525

Magnetic declination for center of quadrangle, north and south, $5^{\circ} 43' W.$; for south border of quadrangle $5^{\circ} 46' W.$; for west border of quadrangle, $5^{\circ} 38' W.$; through quadrangle, northwest to southeast, $5^{\circ} 51' W.$

Along highways in the southwest corner of quadrangle. (Checked spur line.)

Prim. Trav. Sta. No. 6, 1916.....	37	47	20.9	76	29	03.62	.....
Road forks.....	37	46	50.7	76	29	15.0	3,193
Center of small bridge over creek.....	37	46	48.6	76	29	48.0	2,654

Along highways near west border of quadrangle.

Station 791, Heathsville high school, T road corners near.....	37	55	20.09	76	29	04.69	.....
Center of bridge over creek.....	37	55	53.9	76	29	47.8	4,863

Magnetic declination near west border of quadrangle, $5^{\circ} 57' W.$; in southwest corner of quadrangle, $5^{\circ} 40' W.$

HOMEVILLE QUADRANGLE.

West along Norfolk & Western Ry. and highways near north border of quadrangle. (By J. H. Wilson in 1916-17.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Milepost 55, westbound track.....	36 59 56.0	77 02 13.6	.....
Herma, road crossing, 3,370 feet southeast of milepost 55, westbound track.....	36 59 35.0	77 01 41.4	3,370
Road crossing, on Southern Ry. (narrow gauge), 2,665 feet southwest of milepost 30.....	36 59 45.9	77 08 11.8	.....
Waverly, 4 miles southwest of, 6 feet east of signboard, at southeast corner of Marables crossroads; iron post stamped "Prim. Trav. Sta. No. 59, 1917".....	36 59 56.5	77 08 31.7	1,941
S. J. Parker's mail box, at road south.....	36 59 53.1	77 14 10.9	.....

Magnetic declination near north border of quadrangle, 4° 40' W.

From Marlboro crossroads southwest along highway and Southern Ry. (narrow gage) to Lumberton. (By A. C. Schilling in 1918.)

T road west.....	36 59 42.9	77 08 40.7	.....
Gray's lumber railroad, a narrow gage spur of Southern Ry., crossing on.....	36 59 12.3	77 08 45.9	3,118
County-road crossing.....	36 58 24.8	77 09 05.0	5,051
Railroad switch east.....	36 58 17.5	77 09 06.6	747
Road crossing, 110 feet south of point of switch.....	36 57 52.6	77 09 25.5	2,949
North end of trestle, east rail.....	36 57 23.9	77 09 30.2	2,928
Homeville, 20 feet east of track, about 10 feet north of road, 4 feet west of crossing sign; iron post stamped "Prim. Trav. Sta. No. 1".....	36 56 55.3	77 10 19.04	4,905
Center of wooden culvert under railroad, west rail.....	36 56 37.7	77 10 32.5	2,089
County-road crossing on railroad, east rail.....	36 56 10.4	77 10 40.7	2,841
North end of twin 24-inch vitrified pipe culvert.....	36 55 50.2	77 10 51.4	1,676
Road crossing.....	36 55 23.2	77 11 02.9	3,464
Burt's switch, 714 feet northeast of, at north end of wooden trestle under railroad.....	36 54 45.1	77 11 08.95	3,888
County-road crossing.....	36 54 20.0	77 11 23.4	2,794
North end of trestle under railroad.....	36 53 53.3	77 11 40.3	3,032
Nottoway River, north end of large wooden trestle over; west rail.....	36 53 42.4	77 11 44.6	1,153
Nottoway River, south end of large bridge over, west rail, 270 feet northeast of county-road crossing leading to sawmill.....	36 53 31.8	77 11 51.4	1,209
North end of trestle over small creek.....	36 53 00.9	77 12 15.8	3,695
Lumberton, 20 feet west of track, about 10 feet north of road; iron post stamped "Prim. Trav. Sta. No. 2".....	36 52 53.7	77 12 39.1	2,028

East along highways through center of quadrangle.

North end of bridge over creek.....	36 52 04.1	77 12 28.5	5,081
Center of abandoned railroad crossing road.....	36 51 26.6	77 12 28.3	3,793
T road to Littleton.....	36 50 45.6	77 12 01.8	4,674
T road west.....	36 51 08.9	77 11 48.2	2,603
Railroad crossing on county road.....	36 51 31.4	77 11 26.6	2,880
West end of iron bridge.....	36 51 33.8	77 11 27.6	260
T road south, farm road, 730 feet southwest of another farm road..	36 51 54.1	77 11 02.1	2,915
T road south, farm road.....	36 52 09.7	77 10 40.5	2,364
T road north.....	36 52 21.3	77 10 24.8	1,731
Littleton, 80 feet north of northwest corner of post office and general store, 119 feet south of road forks, 16 feet east of center of road to Yale, 37 feet west of center of road to Sebrell; iron post stamped "Prim. Trav. Sta. No. 3".....	36 53 07.9	77 09 18.0	7,182
T road east.....	36 52 08.0	77 08 31.9	7,124
Surry Lumber Co.'s railroad right of way, 21 feet north of, 18 feet east of center of county road; iron post stamped "Prim. Trav. Sta. No. 4".....	36 51 51.7	77 08 23.1	1,795
Sussex-Southampton county line, gate across road, 4 feet west of west edge of bridge across road.....	36 51 49.6	77 07 44.2	3,169
West end of bridge over swamp.....	36 51 46.5	77 07 22.6	1,789
Center of gate across road.....	36 51 35.1	77 06 30.6	4,374
West edge of small cattle-guard pit, center of road.....	36 51 27.7	77 06 09.5	1,875
Dory, 2.5 miles west of, 35 feet west of center of county road between Waverly and Sebrell, 12 feet south of Surry Lumber Co.'s right of way, in forks; iron post stamped "Prim. Trav. Sta. No. 5, 1918 S".....	36 51 24.7	77 05 52.0	1,448
Road crossing on Surry Lumber Co.'s right of way.....	36 51 14.7	77 04 47.1	5,376
Log road crossing road.....	36 51 22.2	77 03 58.6	4,011
Dory, beginning of spur track east to.....	36 51 33.0	77 03 13.0	3,866

HOMEVILLE QUADRANGLE—Continued.

From Dory northeast along Surry, Sussex & Southampton Ry. (narrow gage) to east border of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
Dory, 81 feet east of Surry Lumber Co.'s pumping station, 162 feet northeast of northeast corner of freight station, 12 feet south of one pine tree and 9 feet north of another pine tree; iron post stamped "Prim. Trav. Sta. No. 6".....	36 51 38.4	77 02 52.9	Feet. 1,719
Road crossing on railroad.....	36 51 56.95	77 02 45.85	1,961
Center of large wooden culvert across railroad, 104 feet south of county-road crossing.....	36 52 17.4	77 02 36.2	2,209
Road crossing on railroad.....	36 52 42.8	77 02 24.1	2,756
Manry, north end of spur from main line.....	36 53 22.5	77 02 05.4	4,287
Manry, point of switch at.....	36 53 26.9	77 02 03.25	485
Road crossing on railroad.....	36 53 58.8	77 01 48.2	3,443
Surry-Southampton county line, on or near, south end of large wooden trestle over railroad.....	36 54 28.9	77 01 33.8	3,269
Small road crossing railroad, east rail.....	36 54 45.3	77 01 23.2	1,859
County road crossing railroad, west rail.....	36 55 32.1	77 00 44.0	5,713
Dory, 5 miles northeast of, at junction of Surry Lumber Co.'s railroad with county road, 11 feet northwest of northwest rail, 21 feet southeast of center of county road, 47 feet southwest of signpost reading "Railroad crossing"; iron post stamped "Prim. Trav. Sta. No. 7, 1918 S".....	36 55 41.7	77 00 34.5	1,241
Farm-road crossing, northwest of northwest rail.....	36 56 02.7	77 00 13.3	2,730

Along Norfolk & Western Ry. in northeast part of quadrangle.

Road crossing, east rail.....	36 58 38.2	77 00 14.4	.....
Wakefield, 1.5 miles northwest of, southwest side of track, in north face of concrete foundation to semaphore; bronze tablet set vertically, stamped "111 1917".....	36 58 53.3	77 00 37.5	2,421
Small concrete culvert, center of.....	36 59 08.1	77 01 00.0	2,359
Herma, road crossing, 3,370 feet southeast of milepost 55, north-west-bound track.....	36 59 35.0	77 01 41.4	4,321

Southeast along Surry, Sussex & Southampton Ry. (narrow gage). (By A. C. Schilling in 1918.)

Dory, Prim. Trav. Sta. No. 6 (previously described).....	36 51 38.4	77 02 52.9	.....
Center line of county road and west rail.....	36 51 12.7	77 03 06.7	2,832
Dory, 1.5 miles south of, northeast corner of intersection of Surry, Sussex & Southampton Ry. and road to Sebrell, 6 feet east of east rail, 22 feet south of intersection of county road and east rail, 27 feet southeast of signpost; iron post stamped "Prim. Trav. Sta. No. 9".....	36 51 04.7	77 03 07.6	813
Center of large wooden culvert.....	36 50 14.1	77 02 24.7	6,193
Center line of county road between Courtland and Ivor.....	36 50 00.0	77 02 12.6	1,738
Center line of iron culvert, 1,050 feet northwest of center of wooden culvert.....	36 49 07.4	77 01 27.5	6,454
Vicksburg, north side of county road between Courtland and Ivor, 95 feet west of west rail of Surry, Sussex & Southampton Ry., 9 feet north of mail box; iron post stamped "Prim. Trav. Sta. No. 10".....	36 48 50.6	77 01 14.5	2,004
Point of switch east to lumber camp, 578 feet northwest of center line of county road.....	36 48 39.6	77 01 03.6	1,428
Center line of county road, on west rail.....	36 47 29.4	77 00 03.2	8,629
Sedley, southwest corner of railroad junction, 30 feet south of south rail of Virginian Ry. 8 feet west of west rail of Surry, Sussex & Southampton Ry.; iron post stamped "Prim. Trav. Sta. No. 11" (in Ivor quadrangle).....	36 46 29.0	76 59 17.3	7,165

West along Virginian Ry.

Road crossing, 619 feet west of east end of trestle 96 feet long....	36 46 28.3	77 00 23.7	5,402
Farm-road crossing.....	36 46 27.0	77 01 50.9	7,092
Courtland-Ivor road, west side of, 25 feet south of south rail of Virginian Ry., 9 feet southwest of railroad signpost; iron post stamped "Prim. Trav. Sta. No. 12, 1918".....	36 46 25.9	77 02 47.1	4,574
Center line of concrete-arch culvert.....	36 46 26.3	77 03 22.9	2,911
Wilcox siding, south rail at point of switch.....	36 46 38.6	77 04 00.8	3,296
East end of trestle 143 feet long, south rail.....	36 46 49.2	77 04 58.3	4,799
East end of trestle, 402 feet long.....	36 46 54.3	77 05 42.0	3,586

HOMEVILLE QUADRANGLE—Continued.

West along Virginian Ry.—Continued.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Sebrell, in corner of engine house, north side of track, bench mark tablet.....	36 47 06.1	77 07 21.8	8,203
Sebrell, on bank, 28 feet south of south rail of Virginian Ry., 30 feet east of center line of county road, 10 feet southeast of railroad signpost, 9 feet northwest of telephone pole; iron post stamped "Prim. Trav. Sta. No. 13".....	36 47 07.2	77 07 34.3	1,016
East end of trestle 70 feet long.....	36 47 15.0	77 08 37.7	5,215
Nottoway River, east end of trestle 854 feet long over.....	36 47 21.4	77 09 32.4	4,493
Virginian Ry., 44 feet north of north rail of, center line of farm road; iron post stamped "Prim. Trav. Sta. No. 14".....	36 47 29.0	77 10 34.8	5,136
Farm-road crossing, 1,632 feet east of milepost 58.....	36 47 30.2	77 11 48.4	7,784
Road crossing, south rail.....	36 47 21.0	77 13 00.9	5,905
Road crossing, south rail.....	36 47 00.4	77 14 17.8	6,595

South along county road.

Upson, Prim. Trav. Sta. No. 4 (previously described).....	36 51 51.6	77 08 23.1	.....
Gate in fence across road, on line between Sussex and Southampton counties, center line of road.....	36 51 02.7	77 08 02.5	5,229
Intersection of county road and Upson-Sebrell road.....	36 50 22.7	77 07 49.0	4,193
Center line of T road west and county road.....	36 49 07.0	77 07 31.8	7,780
North end of wooden bridge 7 feet long.....	36 48 03.2	77 07 43.8	6,531
T road, junction of Upson and Petersburg county road with county road to Sebrell.....	36 47 28.4	77 08 01.3	3,794
Sebrell, Prim. Trav. Sta. No. 13 (described above).....	36 47 07.2	77 07 34.3	3,073

Along Southern Ry. south of Lumberton.

Farm-road crossing.....	36 52 07.5	77 14 35.5	.....
County-road crossing.....	36 52 21.6	77 14 07.3	2,701
County-road crossing.....	36 52 29.0	77 13 37.7	2,521
Trestle 415 feet long, south end of.....	36 52 36.7	77 13 16.4	1,899
Lumberton, 2.7 feet north of post on north side of Southern Ry. track marked "Railroad crossing," 13 feet east of road to Sussex; iron post stamped "Prim. Trav. Sta. No. 2, 1918".....	36 52 53.6	77 12 39.1	3,480
Farm-road forks to left.....	36 53 15.9	77 12 50.7	2,443
Junction with county road between Lumberton and Sussex.....	36 53 42.4	77 13 00.1	2,787
Farm-road forks to left.....	36 53 46.4	77 13 46.2	3,762
Crossroads.....	36 54 17.8	77 14 36.5	5,182

Magnetic declination for south part of quadrangle, 4.2° W.

Southwest along highways in southwest corner of quadrangle. (By J. J. Phelan in 1917.)

Sedley, 1 mile west of, 150 feet south of Virginian Ry., road crossing.....	36 46 26.2	77 00 04.8	.....
T road, center of both roads, 20 feet southwest of signboard reading "Vicksville-Pretlow-Sedley road".....	36 46 26.0	77 00 23.8	1,540
Center of small bridge.....	36 46 13.7	77 00 20.0	1,290
Center of small bridge at road fork.....	36 45 19.0	77 00 12.4	5,566
Center of small bridge about 200 feet downstream from grist mill.....	36 45 15.9	77 00 16.1	439
T road north at Miss Ella Joiner's mail box.....	36 45 15.7	77 01 02.4	3,766
Center of small culvert in swamp.....	36 45 08.6	77 01 12.8	1,107

Magnetic declination along southwest edge of quadrangle, 4.2° W.

IVOR QUADRANGLE.

North along Surry, Sussex & Southampton Ry. and highways near west border of quadrangle.
(By A. C. Schilling in 1918.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Center line of 2 by 6 foot wooden culvert under railroad.....	36 57 13.1	76 59 36.8	.....
Small road crossing railroad, east rail.....	36 57 33.6	76 59 35.9	2,073
Wakefield and Dory road, 50 feet south of intersection with Wakefield and Smithfield road.....	36 58 01.0	76 59 33.1	2,785
Wakefield, 76 feet from southeast corner of Bank of Sussex and Surry, 18 feet southwest of southwest rail of southeast-bound track of Norfolk & Western Ry., 11 feet southeast of center of road; iron post stamped "Prim. Trav. Sta. No. 8, 1918".....	36 58 04.5	76 59 23.4	862
Surry, Sussex & Southampton Ry., center of concrete-arch bridge over.....	36 58 11.8	76 59 33.7	1,111

West along Virginian Ry. (By J. J. Charters in 1918.)

East end of wooden bridge over creek.....	36 45 24.4	76 48 41.3	.....
Collosse, northeast corner of Mr. Johnson's store porch, permanent bench mark marked "U. S. G. S.".....	36 45 40.0	76 49 19.0	3,458
North rail, at edge of road crossing.....	36 46 12.4	76 50 31.7	6,767
Walters station, opposite center of, south rail.....	36 46 18.3	76 51 03.6	2,669
Milepost 40, opposite, north rail.....	36 46 11.5	76 52 11.1	5,533
Blackwater River, east end of wooden bridge over.....	36 46 05.2	76 53 08.4	4,707
Burdette station, north rail opposite southeast corner of railroad station.....	36 46 04.6	76 53 38.2	2,428
North rail opposite milepost 42.....	36 46 09.1	76 54 19.8	3,414
North rail opposite milepost 43.....	36 46 16.0	76 55 24.1	5,280
North rail opposite milepost 44.....	36 46 22.9	76 56 28.4	5,280
Road crossing.....	36 46 27.3	76 57 09.6	3,390
North rail opposite switch block.....	36 46 30.3	76 58 15.1	5,340
Sedley, southwest corner of railroad junction, 30 feet south of south rail of Virginian Ry., 8 feet west of west rail of Surry, Sussex & Southampton Ry.; iron post stamped "Prim. Trav. Sta. No. 11".....	36 46 29.0	76 59 17.3	5,062

Northwest along Norfolk & Western Ry. (By J. J. Charters in 1918.)

Milepost B 373, N 35, north rail opposite.....	36 48 57.4	76 45 26.2	.....
Milepost B 372, N. 36, north rail opposite.....	36 49 30.3	76 46 16.2	5,258
Road crossing.....	36 49 52.3	76 46 49.7	3,521
Dwight, 1.7 miles southeast of, on west side of semaphore 377, in top of foundation of iron ladder; bronze tablet stamped "71 1918".....	36 50 23.0	76 47 36.5	4,915
Milepost B 370, N. 38, north rail opposite.....	36 50 36.6	76 47 57.2	2,181
Milepost B 369, N. 39, north rail opposite.....	36 51 08.6	76 48 46.0	5,119
Milepost B 368, N. 40, north rail opposite.....	36 51 42.8	76 49 38.0	5,464
Zuni railroad station, 450 (?) feet east of, in west end of concrete wall of bridge over highway, north side of track; bronze tablet stamped "39 1918".....	36 51 59.1	76 50 02.7	2,604
Blackwater River bridge.....	36 52 04.9	76 50 12.2	980
Milepost N 42, north rail opposite.....	36 52 52.3	76 51 24.6	7,588
Road crossing.....	36 53 39.7	76 52 36.9	7,585
Milepost N 44, north rail of middle track opposite.....	36 53 54.5	76 52 59.8	2,395
Ivor station, opposite center of, north rail of middle track.....	36 54 24.0	76 53 45.0	4,730
Milepost B 362, N 46, north rail opposite.....	36 55 00.1	76 54 40.2	5,785
Signal block No. 467, north rail opposite.....	36 55 21.5	76 55 13.0	3,435
Ivor, 2.56 miles northwest of, on west side of semaphore 475, in concrete foundation of iron ladder; bronze tablet stamped "Elev. 79, 1918".....	36 55 47.4	76 55 52.5	4,141
Milepost N 48, B 360.....	36 56 05.8	76 56 20.8	2,963
Post marking line between Southampton and Sussex counties, 300 feet northwest of milepost N 49, B 359; north rail of north track opposite.....	36 56 40.2	76 57 13.5	5,513
Signblock 497.....	36 56 59.2	76 57 42.7	3,053
Milepost N 50, B 358, north rail opposite.....	36 57 11.4	76 58 01.4	1,958
Wakefield, 1.07 miles southeast of, on west side of semaphore 505, in concrete foundation of iron ladder; bronze tablet stamped "1918 96".....	36 57 33.0	76 58 34.4	3,452
Wakefield, Prim. Trav. Sta. No. 8, 1918, Schilling (previously described).....	36 58 04.5	76 59 23.4	5,100

IVOR QUADRANGLE—Continued.

South along highways near center of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Ivor station, opposite, center of track.....	36 54 24.0	76 53 45.0	.....
Ivor, 1,600 feet southwest of station, 50 feet east of center of Ivor-Burdette road, 91.1 feet from east corner of brick foundation of residence, 100.8 feet from northeast corner of church foundation; in northeast corner of church lot; iron post stamped (?).....	36 54 13.9	76 54 00.2	1,607
Junction of Courtland road.....	36 53 55.5	76 54 45.7	4,134
Center line of road opposite milepost 2.....	36 53 05.5	76 54 38.2	5,097
Edge of drive southwest through woods.....	36 52 39.0	76 54 35.4	2,693
Center line of road opposite milepost 3.....	36 52 14.1	76 54 28.4	2,578
Ivor, 3.6 miles south of, at crossroads, north side of Zuni-Wakefield road and 40 feet east of Ivor-Burdette road, 49 feet north-east of intersection; iron post stamped "85 1918".....	36 51 36.6	76 54 16.7	3,900
Third class T road bearing north.....	36 50 58.4	76 53 52.5	4,343
T road northeast.....	36 50 32.0	76 53 14.9	4,057
Creek crossing, center line of road, creek 5 feet wide.....	36 50 05.0	76 52 44.8	3,655
Junction of road from Zuni to Unity.....	36 49 43.8	76 52 28.1	2,536
Small wooden bridge, at east end of, center line of road.....	36 49 18.8	76 52 55.0	3,342
Unity, in west face of northwest brick pier of foundation of Mr. Stevenson's store, 60 feet east of T road; iron post stamped "49 1918".....	36 48 45.8	76 53 22.2	4,006
T road bearing south.....	36 48 22.5	76 53 03.8	2,792
T road bearing south.....	36 48 14.3	76 52 28.6	2,980
Center line of road opposite mail box 46 (Wilson).....	36 47 56.1	76 52 45.8	2,314
Center line of road opposite mail box 56 N.....	36 47 52.6	76 53 10.5	2,044
T lane to farm house.....	36 46 53.0	76 53 27.4	6,187
Burdette station, north rail of track opposite.....	36 46 04.6	76 53 38.2	4,968

North along Sussex Lumber Co.'s railroad.

Ivor station, opposite, center of track.....	36 54 24.0	76 53 45.0	.....
Crossing of road through woods.....	36 55 00.5	76 53 41.8	3,700
Second-class road crossing.....	36 55 30.5	76 53 26.1	3,291
Crossing of Ivor and Smithfield road.....	36 56 13.9	76 53 03.4	4,762
Wooden trestle, south end of.....	36 56 37.4	76 52 51.2	2,584
Ivor, 3.1 miles northeast of, at road crossing, 10 feet south of road, 10 feet east of east rail, in top of small concrete culvert; bronze tablet stamped "76 1918".....	36 56 53.3	76 52 42.9	1,742
Switch block, switch bearing northeast.....	36 57 46.4	76 52 27.4	5,523
Second-class road bearing west, crossing of.....	36 57 59.8	76 52 25.6	1,363
Wooden trestle, south end of.....	36 58 17.7	76 51 56.7	2,967
Johnson Corners, 116 feet southeast of road crossing, in top of concrete culvert; bronze tablet stamped "40 1918".....	36 58 32.0	76 51 36.4	2,197
Side track bearing northeast.....	36 59 09.3	76 51 15.8	4,124
Old millstone, on curve of old right of way bearing west.....	36 59 50.3	76 51 14.0	4,155

Northeast along highway from Ivor to Bobs.

Ivor station, opposite, center of track.....	36 54 24.0	76 53 45.0	.....
One-mile post of Sussex and Surrey road, center line of road opposite.....	36 54 28.0	76 52 41.7	5,152
Center line of road opposite mail box 22.....	36 54 25.0	76 51 45.4	4,587
Lane bearing north.....	36 54 31.0	76 51 00.8	3,670
T road north.....	36 54 37.8	76 50 01.4	4,874
Center line of road opposite milepost 4.....	36 54 27.7	76 49 37.2	2,221
Broadwater Bridge over Blackwater River, west end of.....	36 54 19.7	76 48 59.2	3,188
T road southeast.....	36 54 41.0	76 48 34.7	2,940
Intersection of narrow-gage railroad.....	36 54 54.3	76 48 20.8	1,753
Milepost 6, center line of road opposite.....	36 55 05.3	76 48 05.0	1,703
T road west on Raynor branch road from Smithfield road.....	36 55 33.1	76 47 42.2	3,372
Sussex Lumber Co.'s property, center line of road, opposite gate, 60 feet west of house.....	36 56 24.8	76 47 10.8	5,813
Raynor, 100 feet northeast of T road at, in southwest corner of white church property, 12 feet southwest of southwest corner of church, 75 feet northeast of northeast corner of frame house; iron post stamped "Prim. Trav. Sta. No. 12, 1918 C".....	36 56 53.4	76 46 59.2	3,070
T road east to Smithfield.....	36 57 11.5	76 46 20.0	3,604
Bridge over creek, center line of road at south end of.....	36 57 38.9	76 46 04.2	3,054
T road west to Bobs.....	36 58 15.9	76 45 38.3	4,297
Drive to farm house.....	36 58 41.4	76 45 39.2	2,578
Wooden bridge over creek, south end of.....	36 59 06.1	76 45 46.0	2,561
T road east.....	36 59 16.9	76 45 56.9	1,409
T road south.....	36 59 57.1	76 45 49.6	4,103

IVOR QUADRANGLE—Continued.

Along highways near southeast corner of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Crossroads, road east to Suffolk.....	36	46	06.5	76	45	02.7	.....
T road south.....	36	45	45.1	76	45	10.7	2,258

Magnetic declination for center of quadrangle, 4.5° W.; for northeast part of quadrangle, 5.5° W.

Along highways in northeast part of quadrangle.

Road crossing on narrow-gage railroad.....	36	55	18.6	76	45	54.3	.....
Stotts Corners, crossroads, Ivor-Smithfield and Isle of Wight-Bobs roads.....	36	55	34.8	76	46	14.0	2,291
T road through woods, at first decided bend in road from Stotts, 15 feet west of center of lane, at point on line of a long straight section of road northwest.....	36	56	05.7	76	46	11.5	3,133
Raynor, iron post (previously described).....	36	56	53.4	76	46	58.2	6,138

Northwest along highways near east border of quadrangle.

T road southwest.....	36	50	48.2	76	45	10.3	.....
T road north.....	36	51	15.1	76	45	13.3	2,735

Northeast along highways near center of quadrangle. (By J. J. Phelan in 1918.)

West side of road, 14 feet from T road to sawmill, 8 feet from mail box.....	36	45	21.7	76	55	52.3	.....
T road, 9 feet from corner fence post.....	36	46	03.4	76	55	30.9	4,561
Baffle, center of road crossing Virginian Ry., north rail.....	36	46	16.7	76	55	30.3	1,352
Baffle, opposite milepost 43, north rail.....	36	46	16.0	76	55	24.1	511

Magnetic declination near south border of quadrangle, 4.2° W.

JARRETT QUADRANGLE.

In northeast corner of quadrangle. (By J. H. Wilson in 1916-17.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Belcher post office (abandoned), Jerusalem plank road at, at road northeast, 720 feet southeast of road southwest, at which road forks there is an old store building, at center of triangle; iron post stamped "Prim. Trav. Sta. No. 60, 1917".....	36	59	24.6	77	15	16.7	.....

South along highways near east border of quadrangle. (By J. C. Fales in 1917-18.)

Belcher post office (abandoned), 720 feet southeast of old store building; iron post stamped "Prim. Trav. Sta. No. 60, 1917".....	36	59	24.6	77	15	16.7	.....
Steel bridge across Nottoway River, southeast corner of.....	36	58	36.5	77	16	10.0	6,510
Wooden gate at entrance to unpainted two-story house, no fence.....	36	58	10.2	77	16	13.6	2,681
T road to unpainted two-story house.....	36	57	33.3	77	16	07.7	3,760
Road, opposite corner of woven-wire fence, on west side.....	36	56	43.3	77	16	27.0	5,295
Road, opposite woven-wire gate to unpainted house, 300 feet west.....	36	56	00.3	77	16	22.2	4,369
T road west.....	36	55	25.2	77	16	43.0	3,934
Sussex, 50 feet south of W. R. Brown's store, on 2-foot bank, at east edge of road; iron post stamped "Prim. Trav. Sta. No. 1, 1918".....	36	54	52.9	77	16	46.4	3,284

JARRATT QUADRANGLE—Continued.

West along highways through north half of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Blue schoolhouse 200 feet south of road, road opposite.	36	54	48.9	77	16	55.5	841
Road, opposite woven-wire wagon gate to large white house 300 feet south.	36	55	02.0	77	17	24.6	2,709
T road to shanty, 200 feet north of.	36	55	15.9	77	18	35.9	5,956
T road past whitewashed dwelling 500 feet north.	36	55	18.3	77	19	03.5	2,256
Road, opposite sign "5 miles to W. T. Freeman Co."	36	55	24.1	77	20	04.4	4,979
Pipe culvert with concrete ends.	36	55	21.3	77	20	49.3	3,656
Road, opposite sign "4 miles to W. T. Freeman Co."	36	55	16.9	77	21	07.6	1,549
Road fork northwest through woods.	36	55	29.8	77	21	40.4	2,963
Crossroads, Waverly-Stony Creek and Petersburg-Emporia roads.	36	55	41.4	77	22	24.3	3,755
Road, opposite sign "2 miles to W. T. Freeman Co."	36	55	57.8	77	23	00.3	3,364
T road, 950 feet west of, 120-foot steel bridge.	36	56	01.9	77	23	23.6	1,935
Road, opposite sign "1 mile to W. T. Freeman Co."	36	56	35.5	77	23	17.8	3,429
Stony Creek, 210 feet east of Atlantic Coast Line R. R. crossing, 110 feet east of front door of Prince's store, at south edge of road; iron post stamped "Prim. Trav. Sta. No. 8, 1918"	36	56	44.3	77	24	03.6	3,818
Road, opposite sign "1 mile to W. T. Freeman Co."	36	56	27.0	77	25	00.4	4,932
T road to large, unpainted house, 800 feet north.	36	56	28.4	77	26	03.3	5,114
150-foot wooden bridge, southwest corner of.	36	56	41.0	77	26	14.8	1,580
Crossroads, 500 feet north of two-story white house.	36	57	03.1	77	26	36.3	2,837
Road, opposite sign "4 miles to W. T. Freeman Co."	36	56	40.7	77	27	45.2	6,039
T road past two barns 300 feet north.	36	56	37.8	77	28	28.0	3,483
Road fork southwest, mail box in gore.	36	56	32.5	77	28	39.1	1,048
Diston, 40 feet from front door of Samuel Winfield's store; iron post stamped "Prim. Trav. Sta. No. 2, 1918"	36	56	39.1	77	29	53.8	6,104

North along Atlantic Coast Line R. R. and highways near west border of quadrangle.

East rail of south-bound track, opposite semaphore 575.	36	45	09.3	77	29	23.8	.....
East rail of south-bound track, opposite milepost 57.	36	45	43.7	77	28	51.4	4,619
East rail of south-bound track, opposite milepost 56.	36	46	32.8	77	28	29.2	5,285
East rail of south-bound track, opposite milepost 55.	36	47	24.1	77	28	15.4	5,308
East rail of south-bound track, opposite point of switch, at south end of Jarratt yard.	36	48	11.9	77	28	11.0	4,850
Jarratt, 1,800 feet south of depot, on west side of Atlantic Coast Line tracks; iron post stamped "Prim. Trav. Sta. No. 7, 1918"	36	48	32.3	77	28	09.1	2,067
Jarratt, road crossing just south of depot, on south-bound track, joint in west rail.	36	48	47.9	77	28	02.2	1,678
Center of road at wooden-box culvert.	36	49	41.6	77	28	47.4	6,560
Road forks, wood road north, in center and 6 feet from point of gore.	36	49	52.1	77	28	55.0	1,229
Bridge, 10 feet by 14 feet, no rails, center of.	36	50	27.7	77	29	18.4	4,072
Steel bridge across river, at south end of, center line.	36	50	51.0	77	29	36.8	2,789
T road east to negro shack, 200 feet.	36	51	32.1	77	29	50.9	4,311
Wooden bridge with rails, 30 by 14 feet, at south end of, center line; white frame church 400 feet southeast.	36	52	06.2	77	29	45.0	3,481
Forks, woods road northwest.	36	52	40.4	77	29	26.0	3,787
Road fork to negro dwelling 400 feet west, opposite north point of, side of road.	36	53	24.7	77	29	36.8	4,572
Road, opposite and 200 feet west of dilapidated dwelling of Jemino Hill.	36	53	51.0	77	29	42.3	2,700
Road crossing.	36	54	33.8	77	29	36.6	4,354
Road crossing at angle of 75°.	36	55	20.5	77	29	52.8	4,896

East along Virginian Ry. from Jarratt to Gray. (By A. C. Schilling in 1918.)

Jarratt, Prim. Trav. Sta. No. 7 (Fales).	36	48	32.3	77	28	09.1	.....
Jarratt, crossing of Atlantic Coast Line and Virginian railroads, south and west rails.	36	48	56.3	77	27	58.4	2,580
Road crossing.	36	48	52.9	77	27	28.1	2,492
Road crossing.	36	48	46.6	77	26	32.0	4,608
Milepost 71.	36	48	36.9	77	25	05.3	7,116
Farm-road crossing.	36	48	30.9	77	24	12.6	4,328
Brown's station, road crossing near.	36	48	28.9	77	23	54.6	1,483
Farm-road crossing.	36	48	15.9	77	22	46.4	5,695
Farm-road crossing.	36	48	05.6	77	22	00.0	3,917
Gray, 20 feet east of county road and 27 feet south of south rail of main track; iron post stamped "Prim. Trav. Sta. No. 16, 1918"	36	47	47.3	77	20	39.0	6,845

JAREATT QUADRANGLE—Continued.

Northeast from Gray along Southern Ry.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Road crossing	36 48 01.1	77 20 28.8	1,619
Farm-road crossing	36 48 30.8	77 20 14.4	3,223
Trestle 65 feet long, south end of	36 48 43.1	77 20 04.4	1,487
Hilda, 45 feet east of east rail and 64 feet south of southeast corner of depot; iron post stamped "Prim. Trav. Sta. No. 17, 1918"	36 49 12.7	77 19 45.9	3,352
Trestle, 92 feet long, south end of	36 49 43.6	77 19 17.5	3,886
Farm-road crossing	36 49 55.1	77 18 47.4	2,707
Farm-road crossing	36 50 03.6	77 18 25.0	2,013
Farm-road crossing	36 50 31.4	77 17 48.0	4,116
Yale, 19 feet northwest of northwest rail of Southern Ry., 18 feet northeast of county road, 42 feet southeast of south corner of Potridge store; iron post stamped Prim. Trav. Sta. No. 18	36 50 43.6	77 17 16.7	2,831
Trestle 30 feet long, south end of	36 51 05.8	77 16 25.6	4,722
Farm-road crossing	36 51 28.1	77 15 51.1	3,598
Secondary-road crossing	36 51 40.8	77 15 28.6	2,233

On highway from Sussex to Lumberton.

Center line of small bridge (distance from Prim. Trav. Sta. No. 1 at Sussex)	36 54 29.2	77 15 15.2	7,787
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South along Atlantic Coast Line R. R. from Stony Creek to Jarratt.

Stony Creek, about 3,400 feet south of depot; point of switch....	36 56 15.0	77 24 06.0
Milepost 45	36 55 23.1	77 24 25.1	5,477
Milepost 46	36 54 34.0	77 24 47.8	5,296
County-road crossing	36 54 11.4	77 24 58.2	2,429
Road crossing	36 53 50.9	77 25 07.7	2,216
Bridge over Nottoway River, north end of	36 52 58.6	77 25 31.9	5,636
Concrete-arch bridge, north end of	36 52 39.4	77 25 40.9	2,074
Forty-Nine Mile siding (Owen Store), 42.5 feet east of east rail of northbound track of Atlantic Coast Line R. R., 13 feet north of center line of road from Jarratt to Dunning; iron post stamped "Prim. Trav. Sta. No. 19, 1918"	36 52 12.8	77 25 52.7	2,856
Old road crossing	36 51 44.4	77 26 06.4	3,078
Milepost 50	36 51 18.9	77 26 18.4	2,762
Farm-road crossing	36 50 47.3	77 26 33.0	3,410
Farm-road crossing	36 50 25.6	77 26 43.1	2,332
County-road crossing	36 49 57.7	77 26 57.2	3,049
Farm-road crossing	36 49 46.2	77 27 13.2	1,742
Farm-road crossing	36 49 32.1	77 27 35.8	2,324
Jarratt, crossing of Atlantic Coast Line and Virginian railroads	36 48 56.3	77 27 58.4	4,063

Southwest from Gray along Southern Ry.

Gray, Prim. Trav. Sta. No. 16	36 47 47.3	77 20 39.0	.....
Road crossing	36 47 23.5	77 21 19.9	4,105
Trestle over pipe culvert, center of	36 47 06.4	77 21 44.6	2,656
Trestle A. J. 7.9, center of	36 46 28.9	77 22 10.5	4,336
Trestle A. J. 7.2, east end of	36 46 08.2	77 22 44.9	3,491
Road crossing	36 45 34.6	77 23 05.2	3,777
Trestle, east end of	36 45 13.5	77 23 40.0	3,544

Magnetic declination for west border of quadrangle, 4° 20' W.

Along Virginian Ry. east of Gray.

Joyner, on bank 27 feet southeast of center line of county road, 41 feet south of south rail of south track of Virginian Ry., 7 feet east of telephone pole; iron post stamped "Prim. Trav. Sta. No. 15"	36 46 45.3	77 15 07.0	.....
Sussex and Southampton county-line fence	36 46 47.8	77 16 09.9	5,112
Farm-road crossing	36 47 05.4	77 17 29.3	6,699
Farm-road crossing	36 47 24.1	77 18 53.1	7,089
Farm-road crossing	36 47 43.2	77 20 19.1	7,255
Gray, Prim. Trav. Sta. No. 16 (described elsewhere)	36 47 47.3	77 20 39.0	1,674

JARRATT QUADRANGLE—Continued.

Along Virginian Ry. west of Jarratt. (By J. C. Fales in 1918.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Road crossing, just south of Jarratt depot (previously described).....	36	48	47.9	77	28	02.2	.....
Road crossing, at west edge of, joint in south rail of main line.....	36	49	01.5	77	28	45.4	3,779

Northeast along highways near southeast corner of quadrangle. (By H. J. Switzer in 1918.)

Bridge 69 feet long, south end of.....	36	45	01.1	77	18	41.7	.....
Culvert of galvanized iron pipe.....	36	45	01.9	77	18	00.9	3,321
Bridge 7 feet long, west end of.....	36	45	06.0	77	16	50.2	5,767
Junction of roads.....	36	45	16.9	77	15	51.9	4,864
Bridge 7 feet long, east end of.....	36	46	00.1	77	16	02.0	4,448
T road east, center of grass triangle at.....	36	46	19.9	77	15	58.4	2,023
Junction of roads, center of triangle at.....	36	46	39.6	77	16	06.3	2,091
Prim. Trav. Sta. No. 15, at Joyner (previously described).....	36	46	46.3	77	15	07.0	4,867

Magnetic declination for southeast corner of quadrangle, 4° 30' W.

Northwest along highways in northwest part of quadrangle. (By J. C. Fales in 1918.)

Crossroads (position previously given).....	36	57	03.1	77	26	36.3	.....
Road fork, 800 feet south of unpainted farm building.....	36	57	30.8	77	26	59.1	3,359
T road west past whitewashed negro cabin 400 feet distant.....	36	57	41.7	77	27	08.2	1,320
T road, 150 feet north of whitewashed negro cabin, mail box marked Nos. 44 and 47, at northeast corner.....	36	57	59.7	77	27	17.5	1,976
T road west at home of Lucius Flower.....	36	58	20.5	77	28	15.0	5,113
T road east, 700 feet to white farm house, negro house 100 feet south of corner.....	36	58	48.2	77	28	36.8	3,310
Ornamental iron gate in picket fence at entrance to gray house of James Pegram.....	36	59	01.0	77	29	23.4	3,996
Flake, at crossroads near Tucker's store; iron post stamped "Prim. Trav. Sta. No. 3, 1918".....	36	59	40.5	77	29	06.6	4,221

Magnetic declination for northwest part of quadrangle, 4° 10' W.

KARA QUADRANGLE.

Along Seaboard Air Line Ry. near southeast corner of quadrangle. (By J. C. Fales in 1918.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Milepost 72, east rail opposite.....	36	45	44.5	78	00	47.2	.....
Farm crossing, at entrance to white house 200 feet west of track.....	36	45	26.4	78	02	15.9	7,448
Skilton depot, west rail under south edge of first overhead crossing south of.....	36	45	11.8	78	02	56.3	3,600

KILMARNOCK QUADRANGLE.

(By E. L. McNair in 1916.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Freeport, 1 mile northeast of, in pine woods, persimmon tree 10 feet northwest of center of road and 160 feet southwest of gate; copper nail in root, painted "U. S. B. M. 1".....	37	32	53.5	76	29	36.5	.....
Intersection of roads, signboard with pointer to "Coach Point Ferry".....	37	33	38.9	76	29	09.1	5,098

Magnetic declination for south half of west side of quadrangle, 5° 59' W.

KING WILLIAM QUADRANGLE.

North along highways near east border of north half of quadrangle. (By E. L. McNair in 1916.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
T road east.....	37	39	39.9	77	00	00.5	-----
Road forks.....	37	40	05.6	77	00	26.2	3,322
T road south, directly in front of old store at White's shop.....	37	40	47.4	77	00	20.2	4,267
U. S. Coast & Geodetic Survey magnetic station, on courthouse grounds at King William, in rear of jail; stone monument with tablet on top.....	37	41	17.1	77	00	46.1	3,650
King William courthouse, T road north.....	37	41	13.4	77	00	50.0	488
T road southwest at blacksmith shop.....	37	41	39.1	77	01	57.9	6,043
Road east.....	37	42	52.9	77	01	51.6	7,482

Magnetic declination for east border of quadrangle, 5° 35' W.

Along highways in the northeast quarter of quadrangle.

Walkerton, center of draw span across Mattaponi River.....	37	43	22.6	77	01	33.0	-----
Center of bridge over outlet of mill pond.....	37	43	41.9	77	01	13.6	2,495
Road southeast.....	37	44	13.3	77	00	21.9	5,227

Magnetic declination for northeast quarter of quadrangle, 5° 50' W.

East along highways near north border of quadrangle.

T road corners.....	37	44	47.1	77	13	25.7	-----
Enfield post office, 25 feet north and 35 feet west of crossroads at, 15 feet northwest of center of road, 2 feet from wire-fence line, about 100 feet from store and post office; iron post stamped "Prim. Trav. Sta. No. 31, 1916".....	37	44	43.0	77	13	08.8	1,424
T road south.....	37	44	36.4	77	11	54.0	6,037
T road south, 5 feet north of mail box.....	37	44	31.7	77	10	52.7	4,951
T road west.....	37	43	29.9	77	09	49.7	8,044
Manquin post office and store, about 150 feet west of, 115 feet west of road going southwest to Pamunkey, 15 feet south of road, close to wire-fence line; iron post stamped "Prim. Trav. Sta. No. 32, 1916".....	37	42	32.3	77	09	16.2	6,416
T road corners.....	37	42	47.5	77	08	44.4	2,979
T road north.....	37	42	14.5	77	07	11.6	8,164
Road forks, center of grass triangle at.....	37	43	20.0	77	06	50.0	6,843
Road forks.....	37	43	41.5	77	06	02.4	4,400
T road north.....	37	43	34.4	77	05	31.0	2,625
Rumford post office, T road at.....	37	43	28.8	77	05	23.0	858
T road north.....	37	43	17.0	77	04	58.9	2,270
T road south.....	37	43	06.8	77	04	29.0	2,619
Terry Bros. store, T road north at.....	37	43	02.5	77	03	49.9	3,168
Sye, on right bank of Mattaponi River, between Sycamore and Chinkapin Landing on a point on Mill Farm. On front of a barn and a back fence of George Clark, 4 meters back from high-water mark and about 1 meter above it, within 1 meter of top of bank, on level ground; cement block 8x8x20 inches, standing 1 inch above ground and carrying a brass plate with explanatory legend. Submark is the nozzle of a quart bottle 20 inches below surface. Reference marks: (1) Sycamore tree 20 inches in diameter protecting this land, distant 4.904 meters, 87° 49' 12.0" to right of line to station More; (2) southwest corner of George Clark's dwelling, distant 48.554 meters, 200° 57' 13.0" to right of line to station More; (3) northeast corner of George Clark's house, distant 8.040 meters, 263° 05' 30.0" to right of line to station More; (4) cement block back of cluster on top of bank, at edge of field, distant 19.874 meters, 347° 09' 09.0" to right of line to station More.....	37	44	03.88	77	03	06.61	7,113

Magnetic declination for north border of quadrangle, 5° 00' W.

KING WILLIAM QUADRANGLE—Continued.

Along highways near west border of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
<p>NOTE.—The positions on this line have not been adjusted as the closing error of 3.24" in longitude is excessive. It is thought that a mistake in measurement of a chain (300 feet) may have been made between the position of station 4219 at angle in road and that of station 4221 at T road south on the King William sheet. The positions as given for this area are based on the adjusted position of station 2981 at road forks.</p>							
	°	'	"	°	'	"	Feet.
T road east, second class.....	37	41	50.8	77	14	42.6	
T road east to Dabney's bridge.....	37	41	07.1	77	14	42.9	4,414
Angle in road.....	37	40	55.2	77	14	08.8	
T road south.....	37	41	02.3	77	13	31.9	
Totopotomoy Creek, center of wooden bridge over.....	37	40	46.9	77	13	05.0	2,659
Pamunkey station, 700 feet southeast of, 25 feet north of T road corners, 4 feet east of corner fence post, 1.5 feet outside fence line; iron post stamped "Prim. Trav. Sta. No. 44, 1916".....	37	39	48.2	77	11	42.7	8,889
Tie point only.....	37	38	39.29	77	12	03.84	7,173
	37	38	38.81	77	12	07.08	
Error.....			+ .48			— 3.24	

Along highways from center to west border of quadrangle.

Dike triangulation station, on right bank of Pamunkey River, on shore fringed by brush and trees, about 170 meters below U. S. station dikes, about 160 meters above old Montague Landing, 10.5 meters back from shore line, where brush line makes back from river cutting off grassy swamp, on center of high bridge about 7 inches above high water; marked by an iron pipe 3 inches in diameter and 3 feet long, filled with and set in cement, standing 8 inches above the cement, and bearing at top a brass cap with legend.....	37	37	20.07	77	06	16.04	.....
T road southwest and private road northeast.....	37	36	44.7	77	07	49.7	8,344
Granite post, 8 by 8 inches square, standing 2 feet above ground, on south bank of Matadequin Creek, 10 feet north of bridge, county-line stone between Hanover and New Kent counties.....	37	36	59.4	77	08	15.7	2,567
T road south.....	37	37	37.1	77	08	39.3	4,253
Road forks, about 30 feet north of small creek.....	37	38	09.9	77	09	57.9	7,141
Apperson's store, 50 feet west of, T road north.....	37	38	35.1	77	10	32.0	3,742
T road south.....	37	38	32.9	77	11	04.8	2,648
Road forks.....	37	38	31.6	77	11	44.0	3,158

South along highways near south half of west border of quadrangle.

Old Church post office, T road south at.....	37	38	40.3	77	13	17.2	5,645
Matadequin Creek, center of wooden bridge over.....	37	37	54.0	77	13	24.9	4,722
T road southwest.....	37	37	18.5	77	13	28.3	3,606
Creek crossing, small wooden bridge over.....	37	36	42.7	77	13	12.8	3,831
Old Church post office, 3.1 miles south of, 28 feet south and 10 feet east of crossroads, opposite house on southwest corner of crossroads, just inside field, 2 feet from corner fence post; iron post stamped "Prim. Trav. Sta. No. 45, 1916".....	37	36	05.8	77	13	06.6	3,761
Alexander's store, T road east at.....	37	35	11.4	77	13	23.4	5,669
T road southwest.....	37	34	42.4	77	13	33.8	3,056
Crossroads, a cedar tree 15 feet east.....	37	33	59.2	77	13	33.0	4,371
Crossroads, second-class.....	37	33	16.9	77	12	52.0	5,406
Crossroads, main roads.....	37	32	57.6	77	12	30.6	2,597
Road forks.....	37	32	37.6	77	12	14.4	2,414
Dispatch flag station, Southern Ry. track, road crossing.....	37	31	52.1	77	11	53.8	4,897
Road forks, about 40 feet northeast of pine tree at point of triangle.....	37	31	26.6	77	10	56.4	.....
Road forks, road southeast.....	37	31	40.9	77	10	26.5	2,810

KING WILLIAM QUADRANGLE—Continued.

East along highways near south border of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Road forks.....	37	32	00.0	77	09	59.6	2,901
T road north to Quinton station.....	37	32	05.6	77	09	50.8	910
Crossroads.....	37	32	18.6	77	09	18.0	2,955
Road forks, road southwest.....	37	32	05.2	77	09	01.8	1,887
T road south.....	37	32	01.4	77	07	16.4	8,489
New Kent courthouse, 8.25 miles west of, 3.75 miles south of Tunstall, at Pattersons Store, 35 feet north and 10 feet west of crossroads, 4 feet west of corner fence post; iron post stamped "Prim. Trav. Sta. No. 47, 1916".....	37	31	58.1	77	06	56.8	1,622
Road forks, second-class road southeast.....	37	31	55.4	77	06	23.2	2,714
Road forks, second-class road northeast.....	37	31	52.5	77	06	10.1	1,100
T road north.....	37	31	07.5	77	05	02.6	7,097
R. E. Richardson's store, T road east at.....	37	31	28.6	77	04	32.8	3,215
T road south.....	37	31	23.9	77	03	50.5	3,442
Couch's store, T road south at, a T road north 20 feet west.....	37	31	31.4	77	02	20.5	7,296
Road forks, second-class road northwest.....	37	31	37.6	77	01	45.4	2,899
Road north through gate and field to White House station on railroad.....	37	31	36.3	77	01	12.6	2,645
New Kent courthouse, 2 miles west of, 10 feet south and 20 feet west of crossroads, road leading south to Providence Forge and north to White House, 2.5 feet north of telephone pole; iron post stamped "Prim. Trav. Sta. No. 48, 1916".....	37	31	23.9	77	00	32.5	3,463

Magnetic declination for center line of quadrangle (east and west), $4^{\circ} 10' W.$; for west border, $4^{\circ} 40' W.$

Along Richmond and Norfolk highway in southwest corner of quadrangle. (By E. L. MacNair in 1916.)

Road northwest.....	37	31	07.0	77	11	33.1	.....
Chickahominy River, center of concrete bridge over.....	37	30	51.7	77	12	26.3	4,551
T road south.....	37	30	37.0	77	12	39.4	1,824
Road forks, road west.....	37	30	42.0	77	13	53.3	5,977
Road forks, about 35 feet west and 10 feet south of Elko Road signboard, about 12 feet west of Lexington Hotel signboard; iron post stamped "Prim. Trav. Sta. No. 46, 1916".....	37	30	29.2	77	14	33.0	3,448

Along highways in southeast corner of quadrangle. (By J. H. Wilson in 1916.)

T road south.....	37	30	05.0	77	02	13.0	.....
Lane south leading to large white house on hill.....	37	30	23.2	77	01	49.3	2,653
Crossroads.....	37	30	29.8	77	01	28.7	1,794
Second-class road south.....	37	30	49.7	77	00	42.0	4,268

Magnetic declination in south part of quadrangle, $5^{\circ} 03' W.$

LAWRENCEVILLE QUADRANGLE.

South a long highways near southeast corner of quadrangle. (By J. C. Fales in 1918.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
T road to white house with green trimmings 300 feet east.....	36	49	03.2	77	45	10.2	.....
Steel bridge, east guard fence at approach to, south end of.....	36	48	42.1	77	45	36.2	3,005
T road west.....	36	48	25.8	77	45	53.6	2,172
T road east.....	36	48	00.4	77	46	05.2	2,735
Concreteculvert with parapet and wing walls, north end of.....	36	47	09.8	77	46	31.9	5,557
Edgerton, third crossing west of depot, in center of joint in north rail (1,981 feet from Prim. Trav. Sta. No. 13).....	36	46	43.3	77	46	42.3	2,811
T road to Powellton.....	36	46	11.8	77	47	28.2	4,908
T road to unpainted two-story house 100 feet west.....	36	45	23.2	77	47	05.7	5,237

LAWRENCEVILLE QUADRANGLE—Continued.

Along Southern Ry. east from Edgerton.

Station.	Latitude.	Longitude.	Distance between stations.
Edgerton, 100 feet west of depot, on north edge of cut; iron post stamped "Prim. Trav. Sta. No. 13, 1918".....	° ' " 36 46 41.1	° ' " 77 46 18.1	<i>Fect.</i>
Milepost 88, south rail opposite.....	36 46 21.4	77 45 14.3	5,562

Magnetic declination for southeast part of quadrangle, 4° 10' W.

Along Southern Ry. west from Edgerton. (By J. C. Fales in 1918.)

Edgerton, third road crossing west of depot, in center of, joint in north rail.....	36 46 43.3	77 46 42.3	.....
Crossing of Emporia-Lawrenceville road, south rail at.....	36 46 50.8	77 47 41.0	4,883
Milepost 91, south rail opposite.....	36 46 49.8	77 48 21.5	3,293
Road crossing, 200 feet west of "Yard Limit" sign, at west edge of road, joint in south rail.....	36 45 59.9	77 49 25.4	7,247
Overhead bridge at east end of side track, south rail at.....	36 45 23.7	77 50 51.0	7,875
Lawrenceville, at crossing sign, 60 feet east of freight house; iron post stamped "Prim. Trav. Sta. No. 16, 1918".....	36 45 22.9	77 51 03.3	1,007
Milepost 95, south rail opposite.....	36 45 36.3	77 51 54.6	4,387
Milepost 96, south rail opposite.....	36 45 39.8	77 52 59.4	5,284
Farm crossing.....	36 46 02.2	77 53 42.0	4,141
Overhead highway bridge, under west edge of, south rail.....	36 46 01.3	77 54 25.8	3,558
Charlie Hope, overhead highway bridge at, south rail under west edge of.....	36 45 24.1	77 55 25.6	6,159

Southwest along Seaboard Air Line Ry. through center of quadrangle.

Nottoway River, steel truss across, east rail at south end of.....	36 57 22.5	77 45 03.3	.....
Milepost 51, east rail opposite.....	36 57 13.6	77 45 32.0	2,498
Rawlings, west rail at road crossing, at.....	36 56 54.1	77 45 44.5	6,209
Timber trestle 180 feet long, east rail at south end of.....	36 56 29.4	77 47 49.5	5,836
Farm-road crossing, second joint in east rail south of, 338 feet south of milepost 54.....	36 56 07.2	77 48 21.8	3,451
Kress depot, opposite waiting room door, east rail.....	36 55 42.9	77 48 48.1	3,257
West switch point at turnout to F. J. Kress Box Co.'s mill.....	36 55 25.4	77 49 01.8	2,085
Farm crossing, west rail at.....	36 54 32.9	77 49 14.0	5,401
Warfield depot, opposite colored waiting-room door at west rail of house track.....	36 53 43.5	77 49 36.6	5,326
Farm crossing, fifth joint in east rail east of, 2,000 feet south of trestle.....	36 52 41.7	77 50 37.9	7,988
Farm crossing, east rail at.....	36 52 31.9	77 51 34.4	4,698
Alberta, 900 feet west of depot, 15 feet south of main line of Virginian Ry.; iron post stamped "Prim. Trav. Sta. No. 20, 1918".....	36 51 53.8	77 53 08.6	8,573
Alberta, overhead girder bridge for Virginian Ry. crossing, under north edge of, west rail of Seaboard Air Line Ry.....	36 51 50.5	77 53 01.8	650
Farm crossing, east rail at.....	36 51 13.4	77 53 49.5	5,399
National Highway crossing, east rail at.....	36 50 33.5	77 54 20.3	4,752
Cochran depot, opposite spout of water tank, east rail of main line.....	36 49 57.7	77 54 40.0	3,953
Farm crossing, first joint in west rail south of.....	36 49 43.9	77 55 22.6	3,740
Overhead road crossing, east rail at north edge of.....	36 49 03.1	77 56 08.4	5,557
Overhead road crossing, center line of track at north edge of.....	36 47 56.9	77 57 08.2	8,270
Grandy depot, about 600 feet southwest of, opposite milepost 68.....	36 47 46.7	77 57 45.4	3,195
Overhead road crossing, west rail under north edge of.....	36 47 05.2	77 58 04.3	4,474
National Highway crossing, 1,830 feet east of milepost 70, 16 feet south of track; iron post stamped "Prim. Trav. Sta. No. 23, 1918".....	36 46 42.2	77 58 45.0	4,048
300-foot trestle, west rail at north end of.....	36 46 29.1	77 59 14.2	2,719
Milepost 71, center of track opposite.....	36 46 05.8	77 59 56.5	4,166

West along Virginian Ry. through center of quadrangle.

Milepost 90, south rail opposite.....	36 50 01.5	77 45 15.1	.....
Dolphin, at east end of side track, point of switch.....	36 49 57.6	77 46 27.5	5,897
Dolphin depot, opposite waiting-room door, joint in north rail of main track.....	36 49 45.9	77 47 18.9	4,341
Milepost 93, north rail opposite.....	36 49 55.3	77 48 23.7	5,345
Large concrete-arch culvert, north rail over.....	36 50 01.5	77 49 00.5	3,060
Milepost 94, center of track opposite.....	36 50 11.3	77 49 25.1	2,223
Road crossing, unpainted store 75 feet north.....	36 50 44.4	77 50 23.3	5,796
Milepost 96, south rail opposite.....	36 51 11.5	77 51 11.2	4,760

LAWRENCEVILLE QUADRANGLE—Continued.

West along Virginian Ry. through center of quadrangle—Continued.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
County-road crossing, south rail at center line of.....	36	51	27.5	77	51	39.4	2,801
Road crossing, south rail at.....	36	51	47.8	77	52	20.6	3,924
Alberta, Prim. Trav. Sta. No. 20 (previously described).....	36	51	53.8	77	53	08.6	3,944

(By J. C. Fales in 1918.)

Alberta, Prim. Trav. Sta. No. 20 (previously described).....	36	51	53.8	77	53	08.6	.....
Milepost 99, north rail opposite.....	36	52	08.1	77	54	08.7	5,096
Road crossing.....	36	52	31.8	77	55	05.2	5,175
Second-class road crossing, south rail.....	36	53	18.7	77	56	06.1	6,829
Overhead road crossing, center of.....	36	53	57.4	77	56	58.2	5,794
Overhead road crossing, north end of.....	36	54	11.0	77	57	56.2	4,907

North along highways near west border of quadrangle.

Danieltown, at southeast corner of crossroads, at store and post office; iron post stamped "Prim. Trav. Sta. No. 21, 1918".....	36	54	16.0	77	57	31.9	2,031
Road fork, northeast toward sawmill.....	36	54	49.7	77	57	42.6	3,515
Bridge, wooden, 14 by 20 feet, south end of.....	36	55	17.4	77	58	08.3	3,489
Road forks, middle of south leg of Y.....	36	55	50.8	77	58	05.8	3,378
Crossroads at Barrow's store, north point of Y at.....	36	56	06.3	77	58	44.7	3,530
Road fork east toward house of E. McDaniel.....	36	56	47.1	77	58	46.0	4,126
T road west.....	36	57	14.8	77	58	24.2	3,319
T road east.....	36	57	55.4	77	57	59.7	4,559
Jonesboro, opposite, 35 feet east of two-story building formerly store and post office.....	36	58	43.5	77	57	41.8	5,079
Nottoway River, southeast corner of bridge across, known as "Kennedy's Bridge".....	36	59	21.3	77	57	47.2	3,845
Crossroads near John Maddox's farm, at southwest corner of road intersection; iron post stamped "Prim. Trav. Sta. No. 22, 1918".....	36	59	58.1	77	57	57.3	3,819

East along highways near north border of quadrangle.

Road fork south.....	36	59	56.0	77	57	24.1	2,706
Road fork to unpainted house, 300 feet east of main road.....	36	59	56.6	77	52	09.7	.....
Nottoway River, wooden bridge across known as Gill's Bridge, north end of.....	36	59	46.2	77	50	28.6	.....
T road west.....	36	59	04.3	77	50	21.8	4,274
T road, at northeast corner of; iron post stamped "Prim. Trav. Sta. No. 25, 1918".....	36	58	25.0	77	50	19.8	3,974
Point opposite and 15 feet east of center of back wall of residence of J. R. Howerton.....	36	57	42.5	77	50	01.7	4,538
Zero, road T at T. E. Howerton's store.....	36	57	25.1	77	49	33.5	2,891
Road T, point opposite and 105 feet west of front door of large white frame church.....	36	57	25.2	77	47	56.1	7,906
Rawlings, railroad crossing at, on west rail.....	36	56	54.1	77	46	44.5	6,601

North along highways from Grandy to Tobacco near west border of quadrangle.

Grandy depot.....	36	47	50.8	77	57	41.1	.....
Road fork northeast to unpainted negro house 150 feet east of road.....	36	49	02.4	77	57	37.6	7,248
T road east.....	36	49	46.4	77	57	24.5	4,587
T at junction of road from Grandy with road from Danieltown to Fairview, east point of triangle at.....	36	50	29.3	77	57	20.8	4,350
Road fork to unpainted two-story house 800 feet west.....	36	51	06.7	77	56	58.9	4,177
Bridge, wooden, 16 by 40 feet, east end of.....	36	51	18.5	77	56	46.9	1,546
T road southeast.....	36	51	43.1	77	56	25.6	3,028
T road west.....	36	52	36.9	77	56	31.7	5,467
Second-class road crossing, south rail (previously listed).....	36	53	18.3	77	56	06.1	4,677

Magnetic declination for north border of quadrangle, 4° 17' W.; for west border of quadrangle, 3° 51' W.

McKENNEY QUADRANGLE.

West along Virginian Ry. through south half of quadrangle. (By J. C. Fales in 1918.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Milepost 76, south rail opposite.....	36 49 12.9	77 30 26.8	.....
Milepost 77, south rail opposite.....	36 49 26.6	77 31 29.2	5,260
Milepost 78, 75 feet east of, 30 feet north of track; iron post stamped "Prim. Trav. Sta. No. 9, 1918".....	36 49 34.9	77 32 31.7	5,150
Milepost 79, south rail opposite.....	36 49 18.3	77 33 33.9	5,330
Milepost 80.....	36 49 11.3	77 34 36.6	5,150
Purdy depot, opposite door of white waiting room, south rail.....	36 49 24.8	77 35 19.4	3,743
Milepost 82, north rail opposite.....	36 49 29.5	77 36 41.0	6,644
Milepost 83, south rail opposite.....	36 49 34.8	77 37 45.3	5,264
Road crossing at short spur track, south rail at.....	36 49 44.9	77 38 55.4	5,788
Callaville post office, overhead bridge, south rail at center line of.....	36 49 43.9	77 40 06.3	5,765
Farm crossing, 400 feet west of milepost 86, south rail at.....	36 49 35.3	77 41 02.0	4,616
Adsit depot, opposite door of white waiting room, south rail.....	36 49 38.6	77 42 03.0	4,966
Milepost 88, south rail opposite.....	36 49 46.1	77 43 05.2	5,116
Smoky Ordinary, approximately opposite north face of post office, at west edge of road, 220 feet north of overhead bridge across Virginian Ry., near milepost 89; iron post stamped "Prim. Trav. Sta. No. 10, 1918".....	36 49 55.4	77 44 02.1	4,724

West along Southern Ry. near south border of quadrangle.

Milepost 82, north rail opposite.....	36 45 25.2	77 39 47.4	.....
Milepost 83, south rail opposite.....	36 45 31.0	77 40 51.6	5,254
Road crossing.....	36 45 13.0	77 41 40.0	4,341
Trestle, 150 feet pile bent, at east end of, south rail.....	36 45 08.6	77 42 21.6	3,411
Milepost 87, north rail opposite.....	36 45 36.2	77 44 41.8	.....
Road crossing of Emporia-Lawrenceville road.....	36 45 58.7	77 44 57.3	2,594

Along highways near east border of quadrangle.

Road fork 0.25 mile southwest of Diston.....	36 56 28.5	77 30 08.4	.....
T road west.....	36 55 53.8	77 30 01.2	3,559

West along highways through north half of quadrangle. (By J. C. Fales in 1918.)

Road fork, 0.25 mile southwest of Diston.....	36 56 28.5	77 30 08.4	.....
Matabelum's place, west barn at, road opposite west face of.....	36 56 23.5	77 31 04.5	4,595
Truitt, 0.75 mile east of, fork west.....	36 55 57.9	77 32 10.1	5,918
Truitt, county road, 85 feet north of north face of M. L. Rose's store at.....	36 56 07.0	77 33 00.7	4,213
North side of road, opposite and 100 feet south of negro cabin.....	36 56 13.2	77 33 37.4	3,046
Intersection of roads at angle of 50°.....	36 55 58.0	77 33 52.3	1,947
T road west.....	36 55 38.2	77 34 08.8	2,411
Two-story house with exterior chimney 100 feet north of road, road opposite.....	36 55 33.3	77 35 05.3	4,617
Unpainted negro house belonging to James Abernathy, road opposite and 35 feet north of.....	36 55 42.7	77 35 45.1	3,372
Unused log barn, road opposite and 50 feet north of.....	36 55 46.9	77 36 41.1	4,565
Crossroads 75 feet south of church.....	36 55 44.8	77 37 05.8	2,017
Woodmen's Hall, 50 feet south of south line of, point in "Stage" road.....	36 56 11.2	77 37 24.9	3,086
30-foot I-beam bridge with pipe railings, east end of, at center line.....	36 55 32.8	77 38 18.7	5,846
Road fork north west, at Hartwell house.....	36 55 19.9	77 39 16.2	4,854
Unpainted storehouse on south side of road, road opposite.....	36 54 53.1	77 39 46.8	3,666
Clark's store, opposite and 40 feet west of front door of.....	36 54 44.4	77 40 05.3	1,740
Old log tobacco barn 400 feet west of road, road opposite.....	36 55 36.3	77 40 24.7	5,482
Log stable 200 feet east of road, road opposite southwest corner of.....	36 55 55.6	77 40 33.0	2,064
Crossroads, 500 feet east of tobacco warehouse.....	36 56 49.7	77 40 54.6	5,751
Picket wagon gate to white house 400 feet west, road opposite.....	36 57 32.6	77 41 23.1	4,915
Crossroad from schoolhouse, 300 feet east to white dwelling, 700 feet west of.....	36 58 01.4	77 41 56.7	3,988
Crossroad known as "Pony Road".....	36 58 14.0	77 42 07.6	1,550
McKenney, 0.5 mile east of depot on Seaboard Air Line Ry., 300 feet west of intersection of Bolling Road with center line of Boydton Plank Road; iron post stamped "Prim. Trav. Sta. No. 11, 1918".....	36 58 57.6	77 43 01.0	6,181

McKENNEY QUADRANGLE—Continued.

Along Seaboard Air Line Ry. northeast from McKenney.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
McKenney, on east rail of main track of Seaboard Air Line Ry., at second joint north of north face of depot.....	36	59	18.4	77	43	21.5	2,683
Milepost 46, east rail opposite.....	36	59	58.2	77	42	09.2	7,106

North along highways near west border of quadrangle.

Smoky Ordinary, Prim. Trav. Sta. No. 10 (previously described).....	36	49	55.4	77	44	02.1	.....
Road fork at 30° angle, point of gore.....	36	50	34.2	77	43	30.1	4,707
Sign reading "Lawrenceville 11 miles," road opposite.....	36	51	19.2	77	43	46.8	4,754
T road to unpainted house 700 feet east of road junction.....	36	52	00.1	77	44	08.2	4,485
Timber bridge 150 feet long, south end of.....	36	52	11.2	77	44	15.0	1,253
Concrete bridge, south end of.....	36	53	18.8	77	44	16.0	6,836
T road to white bungalow 500 feet west.....	36	53	42.8	77	44	09.6	2,484
Plank bridge across road ditch, at entrance to log cabin, road opposite.....	36	54	02.0	77	44	05.0	1,984
I-beam girder bridge 90 feet long, with pipe railing, north end of.....	36	55	08.4	77	44	10.3	6,726
Woods road east through barred gate, road opposite.....	36	55	39.4	77	44	11.2	3,144
Nottoway River, steel bridge across, south end of.....	36	56	41.2	77	43	59.6	6,317
Unpainted barn 10 feet east of road, east edge of road opposite north face of.....	36	57	13.4	77	43	42.9	3,532
Woven-wire gate, at entrance to white house 600 feet west, road opposite.....	36	58	08.9	77	43	40.8	5,618
McKenney, Prim. Trav. Sta. No. 11 (previously described).....	36	58	57.6	77	43	01.0	5,894

Magnetic declination for north half of quadrangle, 4° 10' W.; for west border of quadrangle, 4° 20' W.

Along Seaboard Air Line Ry. near west border of quadrangle. (By J. C. Fales in 1918.)

Overhead road crossing, west rail at north edge of (8,431 feet from position at McKenney station).....	36	58	20.6	77	44	36.2
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MONTROSS QUADRANGLE.

Along highways near southeast corner of quadrangle. (By E. L. McNair in 1916.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Private road south through gate.....	38	00	26.8	76	45	07.7	(4,721)
Center of road at ford across small creek.....	38	00	32.6	76	45	35.8	2,325
Road, second class, southeast.....	38	00	50.1	76	46	02.9	2,799
Center of wooden bridge over small creek.....	38	00	03.0	76	46	24.4	5,059

Along highways near south border of quadrangle (east half).

Crossroads, second class, 15 feet east of old gate.....	38	00	09.3	76	49	31.7	(8,117)
Road west through field, 40 feet north of entrance to farmhouse.....	38	00	55.2	76	50	04.3	5,328
Havelock post office and store, 30 feet northeast of, 15 feet northwest of center of road, in line with road southeasterly to Ethel, 1.5 feet from northeast corner of old store building; iron post stamped "Prim. Trav. Sta. No. 20, 1916".....	38	01	14.4	76	50	20.2	2,321
Fork of road, center of triangle at.....	38	00	57.9	76	50	48.0	2,786
T road.....	38	00	08.7	76	50	55.7	5,014

Magnetic declination along border near southeast corner of quadrangle, 6° 10' W.

MORATTICO QUADRANGLE.

North along highways near east border of quadrangle. (By E. L. McNair in 1916.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Private roadway east to dwelling house.....	37	48	19.2	76	30	21.4	3,395
Alfonso post office, about 40 feet west of, T road corners at, 15 feet west of well, on root of white-oak tree 2.5 feet in diameter; copper nail and washer, tree painted "U. S. B. M. 8".....	37	48	32.6	76	30	30.4	1,542
T road northwesterly.....	37	49	05.9	76	30	33.1	3,371
T road west, another road turns east 25 feet farther north.....	37	49	24.6	76	30	24.0	2,031
Road east through woods.....	37	49	59.3	76	30	29.4	3,537
T road west.....	37	50	32.8	76	30	33.8	3,410
T road corners, 100 feet west of Lara store and post office.....	37	51	10.0	76	31	03.4	4,447
Forks of road.....	37	51	43.3	76	30	33.8	4,118
Forks of road, 70 feet northwest of signboard marked "Heathsville, Lara, Miskimon".....	37	51	55.7	76	30	16.3	1,880
Heathsville, 3½ miles (by road) northwest of, 8 feet west of road Heathsville to Lara, 540 feet south of Gulick's corners, opposite house on east side of road, in line with east-west fence and south of lane going west to house; iron post stamped "Prim. Trav. Sta. No. 11, 1916".....	37	53	27.6	76	30	04.3	(1,719)

Magnetic declination for east border of quadrangle, 5° 38' W.

Along highways in southeast corner of quadrangle. (Checked spur line.)

Lively post office, crossroads at.....	37	46	39.7	76	30	50.0	(5,060)
Crossroads, second class.....	37	46	16.9	76	31	14.0	3,012
Road forks, second-class road southwest.....	37	45	47.3	76	31	42.4	3,755
Beanes Mill, center of road over mill race.....	37	45	32.7	76	32	10.8	2,722
Bethel M. E. Church South, center of road in front of.....	37	45	08.5	76	32	32.9	3,024

Magnetic declination in southeast corner of quadrangle, 5° 40' W.

Northwest along highways near northeast corner of quadrangle.

Crossroads, just north of road forks.....	37	56	08.0	76	30	15.2	(2,613)
A. L. Clark's mill, center of road over mill race.....	37	56	48.7	76	30	25.8	4,203
T road corners.....	37	56	52.9	76	31	00.7	2,828
Lottsburg, 20 feet east and 10 feet north of, at T road west, at north end of private hedge; iron post stamped "Prim. Trav. Sta. No. 13, 1916".....	37	57	26.9	76	31	05.7	3,455
Road forks near church.....	37	57	50.3	76	31	13.4	2,453
T road northeast.....	37	58	07.2	76	31	43.3	2,942
Headley's mill, at crossing of mill race, center of road.....	37	58	10.3	76	32	31.4	3,863
Callao, 10 feet south and 40 feet east of crossroads at, 18 feet east of center of road, 3 feet from telephone pole; iron post stamped "Prim. Trav. Sta. No. 14, 1916".....	37	58	16.3	76	33	35.8	5,154
Ford across small creek.....	37	58	31.5	76	34	21.5	4,249
Road south.....	37	58	31.8	76	34	44.5	1,843
Hyacinth post office, road forks, 100 feet south of.....	37	59	24.9	76	35	23.9	6,227
T road corners.....	38	00	00.1	76	34	57.8	4,129

Along highways near northwest corner of quadrangle.

Private roads at bend in main road.....	37	59	46.7	76	40	49.2	(6,025)
T road corners, at road south.....	37	59	36.6	76	41	12.5	2,129
Road south.....	37	59	33.4	76	41	56.7	3,558
Road north, second class.....	37	59	42.9	76	42	43.1	3,830
Lyells post office and store, T road east at.....	37	59	50.3	76	43	43.6	4,877

Along highways near west border of quadrangle.

Second-class road west.....	37	59	16.5	76	43	56.0	(3,562)
T road east.....	37	58	40.0	76	44	19.1	4,136
T road east.....	37	57	02.2	76	44	57.6	(3,680)
Road forks, road south to Wellfords wharf and southeast to Emmerston (junction station).....	37	56	26.2	76	44	48.2	3,709

MORATTICO QUADRANGLE—Continued.

Checked spur line along highways near west border of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Fect.
Road west.....	37	55	20.8	76	45	00.2	6,692
Road east.....	37	54	56.9	76	44	53.7	2,470
Road south, second class.....	37	54	36.5	76	44	51.5	2,078

Along highways west to east through center of quadrangle.

Center of bridge over Totuskey Creek.....	37	55	24.5	76	43	15.5	(9,702)
Center of road opposite gate, entrance to farmhouse on north side of road.....	37	55	01.0	76	42	01.8	6,374
Road northeast.....	37	54	25.4	76	41	07.1	5,674
Road west.....	37	54	03.6	76	40	57.8	2,325
T road north at Emmerton.....	37	53	56.4	76	40	47.9	1,075
Road forks.....	37	53	27.8	76	40	15.2	3,906
Fork of roads near church, road southeast.....	37	53	22.9	76	39	57.2	1,520
Farnham post office, 0.8 mile west of, at corner where road goes west to Sharps, 15 feet south of Emmerton-Farnham road and 20 feet east of road to Sharps, 20 feet from corner fence post; iron post stamped "Prim. Trav. Sta. No. 18, 1916".....	37	53	27.7	76	38	17.2	8,040
Farnham post office, 350 feet west of, T road north.....	37	53	09.6	76	37	33.3	3,964
T road north.....	37	52	59.6	76	36	24.6	5,601
Road north.....	37	52	47.3	76	35	41.2	3,697
T road south.....	37	52	38.1	76	35	13.5	2,404
Private road to house.....	37	52	00.9	76	34	28.7	5,200
Farnham, $\frac{3}{4}$ miles southeast of, 12 feet southeast of center of road, in root of pine tree; copper nail and washer, painted "U. S. B. M. 11".....	37	51	49.0	76	34	02.6	2,410
Center of Lara-Farnham road, in line with road south.....	37	51	46.4	76	33	52.5	862
Road forks, center of grass triangle at.....	37	52	10.9	76	33	21.5	3,511
Road forks, road north about 100 feet east of road south.....	37	52	08.2	76	33	00.8	1,686
Road forks, about 0.6 mile north of camp grounds.....	37	53	05.6	76	32	28.6	6,349
Crossroads, second-class road west through woods.....	37	53	31.5	76	32	33.0	2,646
T road corners, road east.....	37	54	08.5	76	32	41.0	3,794
Road forks, 15 feet east of signboard.....	37	53	50.6	76	31	49.2	4,527
Road forks, 30 feet southeast of signboard.....	37	54	03.7	76	31	07.9	3,564
Prim. Trav. Sta. No. 11.....	37	53	27.6	76	30	04.3	6,278

Magnetic declination near northeast corner of quadrangle, $5^{\circ} 45' W.$; near north-west corner of quadrangle, $5^{\circ} 54' W.$; near west border of quadrangle, $6^{\circ} 10' W.$; west to east through center of quadrangle, $5^{\circ} 40' W.$

Along highways across extreme southwest corner of quadrangle.

Montague post office, T road north at store.....	37	46	05.1	76	44	14.3	(4,021)
Laneview post office and store, 90 feet south of, 50 feet south and 40 feet east of crossroads near store, at fence line, 15 feet southeast of end of tile road drain; iron post stamped "Prim. Trav. Sta. No. 22, 1916" (this post is said to be exactly on line between Essex and Middlesex counties).....	37	45	25.9	76	43	22.4	5,759

Along highways near south border of quadrangle.

T road northwest, second class.....	37	46	16.6	76	41	39.7	9,711
Butylo post office, at crossing of Middlesex and Essex county line, center of road.....	37	46	09.3	76	41	12.8	2,280
Temporary bench mark No. 13, at Bay Port, 100 feet south of store and post office, 20 feet west of road, at edge of timber; copper nail in root of gum tree, painted "U. S. B. M. No. 13".....	37	45	15.3	76	40	26.9	6,585
Center of bridge.....	37	45	02.7	76	40	17.7	1,469

Magnetic declination for extreme southwest corner of quadrangle, $5^{\circ} 40' W.$; magnetic declination near south border of quadrangle, $5^{\circ} 35' W.$

MOYOCK QUADRANGLE.

South along Norfolk Southern R. R. near northwest corner of quadrangle. (By F. J. McMaugh in 1917.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Fect.</i>
Road crossing.....	36 44 56.8	76 13 50.1	.....
Butts, road crossing at.....	36 44 35.6	76 13 26.9	2,862
Tree, east of fork in road.....	36 44 45.2	76 12 52.7	2,950
Intersection of farm road west, 20 feet southwest of corner of fence.....	36 44 59.1	76 12 33.5	2,098

NEW KENT QUADRANGLE.

Near Dudley's ferry. (By E. L. McNair in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Fect.</i>
Dudley's ferry, Brooks's residence at, in west wall between two chimneys; bronze tablet stamped "Prim. Trav. Sta. No. 349".....	37 31 47.7	76 46 49.4	.....
Dudley's ferry, 0.5 mile east of forks, 25 feet west and 10 feet north to signpost marked "To bridge".....	37 31 53.4	76 46 20.9	2,381
Triangulation station Mat, on east side of Mattaponi River, about 1,800 meters northeast of West Point, on "Shell Point," on land of Mr. George, on southwest end of old field forming a point of high ground between river and grassy bight 30 meters wide and 60 meters long, 13 meters back from high-water line and 8 feet above it; cement block 8 by 8 by 24 inches with legend and triangle. Reference marks: (1) Head of spike in lone cedar tree, 9-in. in diameter, near foot of slope between station and river, distance 7.472 meters, 115° 33' 18.3" to right of line to station Brooks; (2) cement block at edge of brush, 1 foot northwest from fence on south side of farm road, distance 45.321 meters, 247° 58' 23.3" to right of line to station Brooks.....	37 32 28.8	76 46 48.4	4,202
Old chain ferry, near.....	37 32 49.8	76 46 36.0	2,376
White-oak tree at angle in road; copper nail in roof painted "U. S. B. M. 3".....	37 33 53.5	76 45 36.0	8,008
Elsom post office, 700 feet south of, T road corner.....	37 34 11.7	76 45 10.7	2,740

Magnetic declination for south half of east side of quadrangle, 5° 24' W.

Near east border of quadrangle.

Road forks, about 600 feet southeast of Wares Church.....	37 40 49.1	76 45 04.5	(7,160)
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Along highways near west border of quadrangle.

Manor triangulation station.....	37 34 58.11	76 59 27.55
Road crossing at Lester Manor station, on Southern Ry.....	37 35 05.8	76 59 27.9	784
Road forks, road northwest to Idaho.....	37 35 41.6	76 59 36.6	3,685
Crossroads at Lanesville.....	37 56 52.7	76 58 43.4	8,369
Lanesville, $\frac{3}{4}$ mile north of, at forks of road at Brooks blacksmith shop, in line of roads in three directions, 3 feet north of telephone pole; iron post stamped "Prim. Trav. Sta. No. 23, 1916".....	37 37 25.8	76 58 36.6	3,395
Road west to sawmills.....	37 38 01.0	76 58 58.4	3,968
Temporary bench mark No. 17, 2.85 miles north of Lanesville, on Walkerton road, at edge of woods, 10 feet south of road, in root of white-oak tree; copper nail marked "U. S. B. M. 17".....	37 38 51.6	76 59 50.7	6,627

Magnetic declination near east border of quadrangle, 5° 35' W.; near west border of quadrangle, 5° 35' W.

NEW KENT QUADRANGLE—Continued.

East along highways near north border of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	
T road northwest.....	37	44	45.3	76	59	54.0	<i>Feet.</i>
Center of bridge over creek.....	37	44	48.7	76	58	09.0	.....
Forks of road, about 400 feet south of Favor post office.....	37	44	43.5	76	57	28.9	3,260
Center of bridge over small creek.....	37	44	26.7	76	56	58.3	2,987
T road corners at Brown's store.....	37	43	57.5	76	55	21.4	8,325
Stevensville, crossroads at.....	37	43	39.7	76	55	12.6	1,940
Road forks.....	37	43	38.4	76	53	12.6	9,641
Cumnor post office and store, 100 feet southeast of, on southeast side of road, 2 feet from fence line, in line of road northwest; iron post stamped "Prim. Trav. Sta. No. 25, 1916".....	37	43	29.5	76	52	59.6	1,375
Forks of road, about where wagon tracks part.....	37	43	55.4	76	51	48.4	6,288
Road north, second class.....	37	44	16.8	76	51	22.6	2,995
Forks of road, 100 feet south of brick church.....	37	44	55.1	76	50	43.7	4,975

Magnetic declination for northwest quarter of quadrangle, 5° 50' W.

East along highways near south border of quadrangle.

Road forks, second-class road south.....	37	30	53.3	76	59	29.6	.....
New Kent courthouse, 200 feet northeast of church at, forks of road.....	37	30	57.7	76	58	54.0	2,907
New Kent courthouse grounds, U. S. Coast and Geodetic Survey north meridian mark; stone post 6 by 8 inches, standing 2 feet above ground, has been graded around; tower of courthouses 52 feet distant, bearing S. 15° 30' E.....	37	31	04.4	76	58	43.3	1,100
T road north.....	37	31	03.4	76	58	22.6	1,670
Crossroads.....	37	31	02.0	76	58	04.6	1,455
Road forks.....	37	30	59.4	76	57	56.8	684
T road southwest, in triangle formed by roads, 3 feet northeast of large oak tree.....	37	30	34.8	76	57	20.3	3,857
T road north.....	37	30	10.4	76	55	55.1	.....
Private road south to house.....	37	30	23.0	76	54	38.7	.....
T road south.....	37	30	25.4	76	54	31.0	673
Road forks, point is at parting of wagon tracks.....	37	30	08.5	76	54	02.7	2,853
Road forks.....	37	30	09.0	76	53	31.5	2,512
T road south in woods, about 20 feet east of road north.....	37	30	02.3	76	53	03.5	2,357
Road forks, 400 feet southeast of church.....	37	30	07.0	76	52	28.4	2,875
T road south.....	37	30	01.4	76	52	14.8	1,235
Road forks.....	37	30	03.5	76	49	55.4	.....
Bridge over small creek.....	37	30	03.3	76	49	40.7	1,192
Road forks, about 60 feet south of where wagon tracks meet.....	37	30	11.3	76	49	20.2	1,835
Road forks.....	37	30	23.0	76	49	19.6	1,193
T road, second class, a little east of south.....	37	31	00.1	76	48	50.4	4,421
Brick House (2) triangulation station, on most promising point of ground on west side of York River southeast of West Point. On each side of this point, which is 70 meters wide, a prong of marsh extends into the land. Station is 15 meters back from top of river bank and 30 meters from high-water line and about 8 feet above it, on center point of high ground of old field; cement block 8 by 8 by 24 inches with legend and triangle on brass cap cast in the top. Reference mark: Cement block with brass cap and arrow. Block is 8 by 8 by 24 inches and projects 1 inch above surface of ground, distant 50.203 meters, 213° 46' 54.3" to right of station Pam.....	37	30	46.00	76	48	17.98	2,976

Magnetic declination along south border of quadrangle, 5° 00' W.

Along highways diagonally through the northeast quarter of quadrangle.

Creek, center of bridge over.....	37	44	24.4	76	47	46.1	.....
Road forks, at parting of wagon tracks.....	37	44	05.5	76	47	56.8	2,090
T road forks, second-class road south.....	37	43	46.5	76	47	29.5	2,918
Small creek, ford of.....	37	43	29.2	76	47	00.1	2,939
Crossroads, second-class roads east and west.....	37	43	13.9	76	46	51.2	1,703
Road forks, road south.....	37	42	47.8	76	46	52.1	2,643
T road east, 30 feet north of a T road west.....	37	42	31.3	76	47	03.4	1,893
T road northeast, 1,400 feet north of Dragonville.....	37	42	03.2	76	46	50.8	3,015
Road forks, road southwest.....	37	41	30.1	76	46	29.4	3,760
Road forks, road south.....	37	41	04.6	76	45	38.1	4,862
Forks of road, 600 feet southeast of Wares Church.....	37	40	49.14	76	45	04.52	3,127

NEW KENT QUADRANGLE—Continued.

West along highways through center of east half of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Road forks, at west end of triangle formed by roads, in line with road southwest to Little Plymouth and road north to Coldwater.....	37 39 16.34	76 44 04.48	.....
Road forks, second-class roads north and northwest.....	37 38 50.2	76 45 08.5	5,784
Crossroads, about 200 feet north of small house.....	37 38 29.2	76 45 24.8	2,496
Temporary bench mark No. 19, on south side of road, near edge of swamp where an old road goes south; copper nail driven in side of gum tree, painted "U. S. B. M. 19".....	37 38 06.7	76 46 44.9	6,828
Road forks, road north.....	37 38 13.8	76 46 56.2	1,167
Plymouth, 0.8 mile north of, at E. Bew's store, opposite road east to Coldwater, 15 feet west of road north to Dragonville, 2.5 feet west of telephone pole, inside of wire fence; iron post stamped "Prim. Trav. Sta. No. 28, 1916".....	37 38 17.4	76 47 17.2	1,727
Little Plymouth post office, T road corners at, road southwest.....	37 37 41.5	76 47 39.4	4,046
Clifton Landing, T road northeast.....	37 37 04.4	76 48 40.6	6,190
Clifton triangulation station, on left bank of Mattaponi River, 0.25 mile above Clifton wharf, on lower part of large marsh, about 180 meters above the mouth of creek running behind marsh, in front of western quarter of a small circle of pine trees on opposite side of creek, 6 meters back from high water river line and 12 meters back from lower outer grass line, on somewhat firm marsh ground, 1 foot above ordinary high water; marked by an iron pipe.....	37 36 25.70	76 49 18.76	4,972

Magnetic declination for northeast quarter of quadrangle, 5° 30' W.; for center of east half of quadrangle, 5° 30' W.

NEWPORT NEWS QUADRANGLE.

South along Norfolk Southern R. R. (By F. J. McMaugh in 1917.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Second-class road crossing.....	36 49 24.6	76 15 18.4	.....
Road crossing.....	36 49 14.8	76 15 28.2	1,265
Carolina Junction, south rail of Virginian Ry. and east rail of Norfolk Southern R. R.....	36 49 00.1	76 15 42.9	1,908
Road crossing, 300 feet south of south end of siding.....	36 48 25.6	76 15 29.1	3,670
Road crossing.....	36 48 09.8	76 15 24.3	1,641
Providence siding, road crossing just south of.....	36 47 54.0	76 15 19.5	1,653
Providence Junction, switch at north end of siding, opposite sign "Providence Junction".....	36 47 18.6	76 15 08.6	3,682
Second-class road crossing, 36 feet north of semaphore at south end of siding.....	36 46 53.2	76 15 00.8	2,653

North along Virginian (Tidewater) Ry. (By F. J. McMaugh in 1917-18.)

Second-class road crossing.....	36 52 18.3	76 15 01.2	.....
Fairmont Park, intersection of Ocean View electric line and Virginian Ry. at.....	36 52 36.8	76 15 05.7	1,892
Second-class road crossing.....	36 52 42.7	76 15 07.2	610
Railroad trestle, south end of.....	36 53 05.5	76 15 12.9	2,354
Trestle, 400-foot, south end of, about 400 feet south of road crossing.....	36 53 17.5	76 15 15.9	1,239
Road crossing, about 60 feet south of switch stand (northerly one of two crossings).....	36 53 50.9	76 15 24.2	3,447
Trestle, south end of, about 440 feet south of road crossing.....	36 54 13.5	76 15 29.8	2,327
Second-class road crossing.....	36 54 27.5	76 15 35.9	1,503
Point of switch, 300 feet southeast of road crossing.....	36 54 32.9	76 15 41.6	715
Intersection of Virginian Ry. and electric railroad, on north rail of Virginian and east rail of east track of electric road.....	36 55 00.0	76 16 21.3	4,234

South along electric railroad.

Navy Base road, center of, near A. C. Ward's corner, 25 feet north of concrete road, in line with east rail of electric road...	36 54 53.1	76 16 22.7	705
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NEWPORT NEWS QUADRANGLE—Continued.

West along highway.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
T road south, center of.....	36 54 58.7	76 16 59.0	3,002
T lane south, white house with green shutters on west side, yellow store 150 feet east of lane.....	36 54 57.7	76 17 57.9	4,786
On electric railroad, west rail of east track, 12 feet north of mile-post marked "N 6".....	36 54 58.0	76 18 31.9	2,758

North along electric railroad.

Lawless station	36 55 02.4	76 18 36.7	589
Glendale Avenue crossing, on west rail of east track	36 55 38.9	76 19 04.4	4,323
Intersection of Pine Beach electric line and belt line, south rail and west rail of east track	36 56 14.0	76 19 07.4	3,650
Intersection of Virginian Ry. and Pine Beach electric line, 65.14 feet east of west rail of east track, 8 feet east of east abutment of railroad bridge, 3 feet south of telegraph pole; iron post stamped "Prim. Trav. Sta. No. 4, 1917".....	36 56 32.5	76 19 08.2	1,872
Overhead bridge of Virginian Ry., center of.....	36 56 33.0	76 19 09.0	83

East along electric railroad from Pine Beach to Ocean View.

Intersection of west rail of railroad spur and north rail of electric road.....	36 56 40.0	76 18 25.8	3,582
Pennsylvania State Building, tower of (U. S. Coast and Geodetic Survey triangulation station).....	36 57 02.87	76 18 47.44	2,899
Bush Creek, west end of bridge over.....	36 56 38.3	76 18 05.7	1,642
Road crossing.....	36 56 27.0	76 17 33.8	2,837
Mason Creek, west end of bridge over.....	36 56 24.0	76 17 09.0	2,033
Mason Creek, center of draw span over.....	36 56 24.1	76 17 02.7	513
Road crossing.....	36 56 29.1	76 16 45.2	1,609
Road crossing.....	36 56 41.0	76 16 27.4	1,880
Road crossing near Ridgeville station.....	36 56 56.1	76 16 03.0	2,499
Road crossing at Windemere station.....	36 57 02.8	76 15 51.0	1,192
Virginia Bay station, 100 feet north of, on east rail of west track, in line with north rail of south track of electric railroad.....	36 57 28.0	76 15 23.2	3,395
Ocean View station, south end of.....	36 57 12.4	76 15 02.6	2,304

West on highway from Oxford station.

Intersection of Ocean View road and Pine Beach road.....	36 54 58.1	76 15 15.8
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West along highways and railroads. (By F. J. McMaugh in 1918.)

Carolina Junction, intersection of Virginian Ry. and Norfolk Southern R. R.	36 49 00.1	76 15 42.9
Road crossing.....	36 48 56.7	76 15 46.3	440
Road crossing.....	36 48 47.7	76 15 55.3	1,172
Intersection of Virginian and Norfolk & Western railroads, south and west rails.....	36 48 34.2	76 16 08.9	1,756
Middle of road, at trolley line.....	36 48 07.4	76 16 35.7	3,482
South rail, at east end of trestle.....	36 47 48.4	76 16 59.5	2,721
Tank of Texas Oil Co.....	36 47 51.5	76 17 15.0	1,303
Draw span over South Branch, center of.....	36 47 49.4	76 17 35.3	1,666
South Branch station, south rail at semaphore.....	36 47 49.2	76 18 07.5	2,620
Intersection of Virginian Ry. and trolley line.....	36 47 44.1	76 18 41.9	2,847
Intersection of Deep Creek road and Virginian Ry.....	36 47 34.8	76 19 44.8	5,198
T road southwest.....	36 48 13.8	76 19 20.0	4,429
South end of bridge.....	36 48 35.1	76 19 03.2	2,552
Road crossing trolley to east.....	36 49 01.8	76 19 31.4	3,544
Petersburg Excelsior Mill, east of, Southern Ry. and Belt Line, east and south rails.....	36 49 26.4	76 19 47.2	2,800
Point of switch, east of junction of single track of Southern Ry. and main line of Seaboard Air Line Ry., cabin 100 feet south.....	36 49 21.3	76 20 20.5	2,760
Portsmouth, intersection of Seaboard Air Line Ry. and Elm Avenue, 86 feet north of, in southwest corner of S. B. Carney's yard, 25 feet east of center line of road; iron post stamped "Prim. Trav. Sta. No. 10, 1918".....	36 49 11.1	76 20 42.8	2,084
Portsmouth, 12 feet east of center of road, 4 feet west of east end of pipe culvert across Elm Avenue, near intersection of east and west road at Brick School; stake.....	36 49 44.4	76 20 51.4	3,442

NEWPORT NEWS QUADRANGLE—Continued.

West along highways and railroads—Continued.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Fect.
Portsmouth, center line of Rodman Avenue and south rail of Atlantic Coast Line R. R.	36	50	03.3	76	20	51.5	2,210
Middle of draw span over West Branch.	36	50	31.6	76	21	42.6	4,881
North edge of road, in front of S. C. Guard's store, opposite T road south.	36	51	03.5	76	22	40.9	5,731
Center of culvert, at east edge of road.	36	51	24.5	76	23	10.1	3,189
Churchland, west rail of west track of Atlantic Coast Line R. R., 10 feet north of center line of road.	36	51	43.7	76	23	36.7	2,904
Churchland, north of, 1,400 feet east of road crossing, east rail, opposite east end of platform marked "104"	36	52	22.6	76	23	45.1	3,995
Center of culvert, about 200 feet northeast of house on farm.	36	52	48.5	76	24	22.6	4,021
Edge of road, 7 feet N. 72° 30' W. of, the more western of two pine trees in field.	36	53	01.1	76	24	07.2	1,781
North end of footbridge.	36	53	27.0	76	24	10.0	2,634
Craney Island, west base (2), triangulation station, on high-water line of the track, 100 meters from station west base (Craney Island base). Station marked with a 5-inch terra-cotta pipe, filled with concrete (U. S. Coast and Geodetic Survey station) as found by F. J. McMaugh, U. S. G. S., 1918.	36	53	52.20	76	24	16.21	2,593

South along railroads and highways. (By F. J. McMaugh in 1918.)

Churchland, west rail of west track of Atlantic Coast Line R. R., at road crossing.	36	51	43.7	76	23	36.7	.....
Churchland, west rail, at north end of platform.	36	51	44.8	76	23	45.1	693
West rail, at north end of trestle.	36	51	31.8	76	24	14.3	2,717
Myers station, about 300 feet southwest of, road crossing.	36	51	08.4	76	24	57.8	4,252
Public-road crossing, near north yard-limit sign; platform northeast of crossing, white house southeast.	36	50	46.2	76	25	38.8	4,016
Boone Junction, intersection of west rail of Southern Ry. and north rail of Atlantic Coast Line R. R.	36	50	33.3	76	26	02.6	2,334
West rail, at point of switch near sawmill.	36	50	01.4	76	27	01.2	5,762
West rail, at public-road crossing, about 500 feet south of trestle; covered station platform southwest of crossing.	36	49	32.5	76	27	54.0	5,188
Shoulder Hill, near northeast corner of freight platform, 23 feet west of west rail of railroad track; iron post stamped "Prim. Trav. Sta. No. 11, 1918"	36	49	09.0	76	28	37.3	4,248
West end of platform, about 30 feet east of road crossing.	36	48	50.5	76	27	09.7	7,366
Peaks siding, south rail, at center of road.	36	48	55.5	76	26	34.0	2,948
Jolliff's Church, east of, road fork northeast.	36	48	38.8	76	26	09.8	2,591
Jolliff's School, 67 feet S. 63° 31' E. from front door of; iron post stamped "Prim. Trav. Sta. No. 12, 1918"	36	48	07.8	76	26	22.7	3,310
Road forks southwest and east, 40 feet S. 32° W. of southwest corner of Mansfield's store, 20 feet S. 60° W. of pump and N. 40° W. of blazed pole on east side of road.	36	47	48.3	76	26	04.0	2,486
Small T road north.	36	47	21.8	76	25	10.0	4,732
Bowers Hill, road crossing.	36	47	10.0	76	24	45.3	2,775
Center of bridge over creek.	36	47	00.8	76	24	34.2	1,289
Center of bridge over creek, near Indian School.	36	46	59.0	76	24	03.1	2,540
Intersection of highway and Virginian Ry., 93.6 feet northeast of; iron post stamped "Prim. Trav. Sta. No. 13, 1918"	36	46	56.8	76	23	56.4	588
Second-class T road east.	36	46	35.0	76	23	23.8	3,449
Intersection of second-class road west, 45 feet north of mail box 132.	36	46	22.4	76	22	32.6	4,358
Center of road, at pipe culvert.	36	46	03.2	76	21	48.8	4,060
Yadkin station, 13 feet east of road crossing, south rail of center of three tracks.	36	45	49.7	76	21	43.8	1,421
South rail of middle track opposite milepost N 10 B 398.	36	45	54.8	76	21	13.0	2,553
Yadkin station, 1 mile east of, at public-road crossing, 73 feet northeast of south rail of middle track; iron post stamped "Prim. Trav. Sta. No. 14, 1918"	36	46	00.8	76	20	40.3	2,729
South rail, opposite milepost N 9 B 399, near point of switch, 60 feet east along track to road crossing.	36	46	05.5	76	20	08.6	2,619
South rail of north track, at road crossing; elevation painted "15.6"	36	46	12.4	76	19	27.4	3,425
South rail, opposite west end of north wing wall.	36	46	16.1	76	19	05.0	1,865
Gilmerton station, west end of, south rail of north track.	36	46	21.5	76	18	32.8	2,672
West end of bridge approach, opposite operating house.	36	46	29.4	76	17	45.1	3,964
Intersection of Elizabeth River Belt Line and Norfolk & Western Ry., 76 feet southwest of; iron post stamped "Prim. Trav. Sta. No. 15, 1918"	36	46	32.7	76	17	21.9	1,912
South rail of north track, at west end of trestle, at road crossing.	36	46	43.5	76	16	47.6	3,001
Extreme west rail of most westerly track, at road crossing.	36	47	07.3	76	16	17.6	3,428
West rail, opposite milepost marked "N 4 B 404"	36	48	01.9	76	16	02.9	5,944
South Norfolk Junction, intersection of Virginian Ry. and Norfolk & Western Ry., south and west rails.	36	48	34.2	76	16	08.9	2,998

Magnetic declination for quadrangle, 5.0° W.

NEWPORT NEWS QUADRANGLE—Continued.

Along Southern Ry. in southwest part of quadrangle. (By H. J. Switzer in 1917-18.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Shoulder Hill, Prim. Trav. Sta. No. 11, 1918 (described previously).....	36 49 09.02	76 28 37.28	.....
Point of switch at west end of siding.....	36 48 50.0	76 29 11.4	3,381
Bridge A D 9.9, at east end of, on north rail.....	36 48 36.4	76 29 36.1	2,434

Northeast along highways. (By J. J. Charters in 1918.)

T road east to residence.....	36 54 29.8	76 29 56.8	.....
Crittenden, in Methodist parsonage lot, 55.8 feet from southeast corner of house, 85.4 feet from northeast corner of church; iron post stamped "Prim. Trav. Sta. No. 2, 1918 C".....	36 54 41.2	76 29 54.5	1,169

PETERSBURG QUADRANGLE.

South along highways near east border of quadrangle. (By J. H. Wilson in 1916-17.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Prince George courthouse, about 2 miles northeast of, crossroads.	37 14 00.9	77 15 51.5	.....
Road forks, at road northeast.....	37 13 20.6	77 15 36.6	4,246
Prince George courthouse, about 2 miles southeast of, 0.25 mile north of Mount Sinai Church, road forks at road northwest.....	37 12 10.9	77 15 35.7	7,051
Blackwater Swamp, south end of bridge over.....	37 11 39.8	77 15 34.1	3,156
Crossroads, 50 feet east of mail box 54.....	37 11 05.7	77 16 10.8	4,557
T road east, about 0.5 mile southeast of sawmill, which is about 0.25 mile west of road.....	37 10 03.6	77 16 19.9	6,317
Milepost N 72 on Norfolk & Western Ry., 150 feet southeast of, second-class road crossing, westbound track.....	37 09 14.6	77 16 32.7	5,063
Milepost 71, westbound track.....	37 08 44.1	77 15 45.7	4,900

Along highways in southeast corner of quadrangle.

Jerusalem plank road, at road northeast to Disputanta, just north of Moores Mill Pond.....	37 00 43.7	77 16 32.0	.....
Road northwest at colored schoolhouse.....	37 01 48.4	77 15 30.3	8,236
Bridge over creek.....	37 02 39.4	77 15 02.6	5,625

Magnetic declination along east border of quadrangle, 3° 39' W.; for southeast corner of quadrangle, 2° 30' W.

On highway near southwest corner of quadrangle. (By J. C. Fales in 1918.)

T road north, 300 feet to unpainted farm buildings.....	37 00 01.6	77 29 28.1
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PINEY POINT QUADRANGLE.

West along highways near south border of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
T road corners.....	38 00 00.1	76 34 57.8	(4,129)
North end of a 350-foot pile bridge over inlet.....	38 00 27.1	76 35 11.6	2,952
T road corners, road northeast to Kensale.....	38 01 07.2	76 36 11.0	6,245
Old Bear Corners, forks of road at, 80 feet southwest of front of Mrs. Evan's store, about in line with road westerly and road southeast; iron post stamped "Prim. Trav. Sta. No. 15, 1916".....	38 01 14.2	76 36 29.7	1,653
T road corners, roads north, south and east.....	38 01 42.4	76 37 52.9	7,245
Road forks, road easterly.....	38 01 17.9	76 38 21.7	3,387
Three corners at Acorn, about in line with roads in three directions.....	38 01 09.9	76 38 56.9	2,930
Oldham post office, crossroads at.....	38 00 23.1	76 39 49.5	6,327

PINEY POINT QUADRANGLE—Continued.

Along highways in southwest corner of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Road forks, small persimmon tree in center of grass triangle.....	38 00 23.4	76 43 42.7	(3,349)
Lyells, 1.25 miles north of, near forks of road, road southwest to Ethel, 12 feet southwest of Lyells-Nomini Grove road, 45 feet southeast of road to Ethel, at edge of woods; iron post stamped "Prim. Trav. Sta. No. 19, 1916".....	38 00 41.6	76 44 11.8	2,966

Magnetic declination near south border of quadrangle, 5° 45' W.

PORT ROYAL QUADRANGLE.

Along highways in southeast corner of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Lloyds post office, T road corners at.....	38 00 04.9	77 00 40.9	.....
Road forks, road north and road south through gate to house....	38 00 12.0	77 02 05.3	6,790
Road southeast, second class.....	38 00 01.6	77 03 06.3	4,996

Magnetic declination for southeast corner of quadrangle, 4° 50' W.

RICHMOND QUADRANGLE.

East along highways near north border of quadrangle. (By E. L. McNair in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Bridge over small stream.....	37 44 22.2	77 20 14.8	.....
Center of bridge over small stream.....	37 43 21.0	77 18 25.9	10,726
Road forks, T road southwest.....	37 42 50.6	77 17 53.6	4,024
Road forks, in line with road east and road northeast.....	37 42 39.1	77 17 28.5	2,327
Nelson's bridge over Pamunkey River, on line between Hanover and King William counties, center of truss on wooden bridge..	37 42 54.0	77 17 22.3	1,591
Private T road southeast.....	37 44 03.9	77 16 11.9	9,046
Road forks, private road east, about 50 feet northwest of mail box.	37 44 11.9	77 16 07.2	901
Second-class road, T road southeast.....	37 44 52.9	77 16 16.6	4,215

Magnetic declination for north border of quadrangle, 5° 05' W.

Along highways through northeast corner of quadrangle.

NOTE.—The positions on this line have not been adjusted, as the closing error of 3.24' in longitude is excessive. It is thought that a mistake in measurement of 300 feet may have been made between the position of station 4219, at angle in road, and that of station 4221, at T road south, on the King William sheet. The positions as given for this sheet are based on the adjusted position of station 2981 at road forks.

Road forks.....	37 42 39.1	77 17 28.5	.....
Road forks, road southwest.....	37 42 26.7	77 16 44.0	3,811
Road forks, road southwest.....	37 41 58.4	77 15 42.5	5,720
Road forks, road southwest.....	37 41 57.8	77 15 35.3	581

SMITHFIELD QUADRANGLE.

South along highways through center of quadrangle. (By J. J. Charters in 1918.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Smithfield, Main and Commerce streets	36	58	58.8	76	37	49.2	.....
West abutment of bridge over Peg River	36	58	56.7	76	37	17.5	2,580
Road crossing	36	58	48.7	76	36	43.5	2,879
T road south	36	57	01.8	76	35	51.5	11,598
Benns Church, 153 feet northwest of northwest corner of, at corner of church property; iron post stamped "Prim. Trav. Sta. No. 1, 1918 C"	36	56	15.8	76	35	10.7	5,713
Center of road, at junction of T road east	36	55	16.8	76	34	51.2	6,171
T road south	36	54	20.1	76	34	38.5	5,826
Northeast corner of Whitehead Church property	36	53	08.3	76	34	58.7	7,447
Gate at crossing of road and Nansemond and Isle of Wight county line	36	52	47.2	76	34	55.9	2,144
Chuckatuck, 69.2 feet from Pinner's store; nail in stake	36	51	42.0	76	34	50.4	6,610
Junction of T road southwest with Exchange Road	36	51	07.6	76	35	23.2	4,383
Center of road, opposite 8-mile post	36	50	45.7	76	35	29.2	2,272
T road south through woods	36	50	08.1	76	35	21.0	3,859
Center of road, opposite 6-mile post	36	49	13.6	76	34	47.0	6,163
Rieds Ferry; iron post stamped "Prim. Trav. Sta. No. 3, 1918 C"	36	48	24.2	76	34	34.7	5,088
Road, opposite mail box	36	48	00.1	76	34	45.1	2,587
T road southwest, opposite three mail boxes	36	47	15.2	76	35	19.6	5,339
Center of road, opposite mail box	36	46	35.3	76	34	59.8	4,340
T road north	36	45	36.0	76	35	15.5	6,139

From Chuckatuck northeast along highways. (Checked spur line.)

Chuckatuck, at store, nail in stake	36	51	42.0	76	34	50.4	.....
T road east	36	51	40.8	76	34	04.8	3,709
T road north	36	52	03.4	76	33	26.8	3,845
T road southeast, Nansemond River road	36	52	19.8	76	33	08.2	2,537
Center of road, opposite mail box of T. L. Griffin	36	52	38.2	76	32	18.6	4,074
T road north	36	52	49.6	76	32	07.2	1,478
Junction of T road	36	53	06.6	76	31	14.0	4,650
Junction of T road north	36	53	30.3	76	31	05.4	2,495
Hobson post office, center of road opposite	36	53	54.8	76	30	34.4	3,540

Southwest along highways from Chuckatuck to Windsor.

Chuckatuck, at store, nail in stake	36	51	42.0	76	34	50.4	.....
Junction of Exchange-Suffolk road	36	51	07.3	76	35	23.6	4,419
T road west, opposite two mail boxes	36	50	53.8	76	35	40.1	1,910
Center of road, opposite negro church	36	50	41.4	76	35	54.5	1,712
Junction of T road to Rieds Ferry	36	50	34.6	76	36	11.6	1,547
Center of road, opposite drive to Menton farmhouse	36	50	22.8	76	37	10.4	4,917
Center of drawbridge about 50 feet long	36	50	19.4	76	37	35.4	2,061
Everett, 38.5 feet from northeast corner of Saunder's house, in northeast corner of yard; iron post stamped "Prim. Trav. Sta. No. 4, 1918 C"	36	50	18.4	76	37	43.0	621
County-line monument, at edge of woods and road	36	50	07.2	76	38	27.5	3,787
Junction of road crossing north and south, northwest of house	36	49	48.7	76	38	56.1	3,015
T road north, at Griffith's mail box	36	49	33.3	76	39	29.3	3,090
Center of road, at creek crossing	36	49	18.6	76	40	08.1	3,480
T road north to farmhouse	36	49	15.4	76	40	43.6	2,900
Crossroads at store	36	49	12.9	76	41	01.8	1,498
Center of creek crossing road	36	48	52.6	76	41	37.1	3,526
Wooden bridge over creek	36	48	40.2	76	42	48.1	5,907
T road north, at Holland's mail box	36	48	37.0	76	43	35.2	3,338
Windsor, opposite Buck School, center of road	36	48	32.2	76	44	29.4	4,431
Windsor, in cement base of railroad gate, on west side of track; tablet stamped "Prim. Trav. Sta. No. 8, 1918 C"	36	48	28.9	76	44	42.5	1,114

Northwest along Norfolk & Western Ry. and highways.

Road crossing	36	45	35.5	76	40	20.0	.....
Myrtle, road crossing at	36	46	22.7	76	41	31.4	7,520
Road crossing	36	46	56.5	76	42	22.9	5,400
Nansemond and Isle of Wight county line	36	47	01.0	76	42	29.7	721
Road crossing	36	47	27.5	76	43	09.8	4,219
Road crossing	36	48	03.6	76	44	04.5	5,750
Windsor, Prim. Trav. Sta. No. 8	36	48	28.9	76	44	42.5	4,015
First culvert beyond colored church	36	48	59.8	76	44	42.8	3,127
Crossroads	36	50	16.9	76	44	50.9	7,824

SMITHFIELD QUADRANGLE—Continued.

Northeast along highways near west border of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
Windsor, 3 miles north of, in C. E. Cair's front yard, 724 feet east of north corner of house, 6 feet from wooden picket fence; iron post stamped "Prim. Trav. Sta. No. 9, 1918 C"	36 51 29.3	76 44 55.5	Feet.
Center of road, opposite R. B. White's mail box	36 52 12.3	76 44 11.8	5,611
Cement culvert	36 52 29.9	76 43 42.2	2,999
Center of drive to cottage	36 52 58.9	76 44 00.9	3,303
Center of State road, at north rail of narrow-gage railroad	36 53 21.5	76 43 55.5	2,335
Concrete culvert	36 53 52.9	76 43 03.7	5,272
Isle of Wight, 82.7 feet north of U. S. Coast and Geodetic Survey monument; iron post stamped "Prim. Trav. Sta. No. 10, 1918 C"	36 54 28.8	76 42 29.7	4,567

Southwest along highways.

Benns Church, Prim. Trav. Sta. No. 1	36 56 15.8	76 35 10.7	.....
Junction of Isle of Wight and Smithfield roads	36 56 16.3	76 30 20.7	5,688
T road north, center line south of both roads	36 55 35.1	76 37 10.5	5,809
Center line of road to Isle of Wight	36 55 01.8	76 37 28.4	3,678
T road south, center line south of both roads	36 54 36.2	76 38 09.2	4,204
Crossroads	36 54 18.2	76 38 44.0	3,369
T road opposite mail box	36 54 06.5	76 39 33.9	4,224
Crossroads at Hart's store	36 54 00.1	76 40 32.3	4,793
East gatepost of Allmond's farm	36 54 28.8	76 40 56.5	3,508
Junction of Bowling Green road	36 54 40.6	76 42 13.0	6,330
Isle of Wight, Prim. Trav. Sta. No. 10	36 54 28.8	76 42 29.7	1,809

Magnetic declination for center of quadrangle, 5.8° W.; for northeast part of quadrangle, 6.3° W.; for south part of quadrangle, 5.5° W.; for west part of quadrangle 5.6° W.; for southwest part of quadrangle, 5.5° W.

Southwest along Southern Ry. (By H. J. Switzer in 1917-18.)

Signpost reading "Railroad crossing 1 mile"	36 48 22.9	76 30 00.5	.....
Second-class road crossing	36 48 13.2	76 30 18.1	.....
Intersection of north rail of Southern Ry. and east rail of Atlantic Coast Line R. R. at "Atlantic Coast Line crossing"; a road crossing is 1,000 feet east along track	36 47 53.7	76 30 53.2	3,466
Beamon, north rail at east end of station	36 47 33.8	76 31 29.3	3,561
Road crossing, near Wilroy station	36 47 11.3	76 32 01.0	3,435
Pipe culvert	36 46 50.6	76 32 18.0	2,512
Road crossing	36 46 14.6	76 32 47.3	4,348
Northeast end of trestle A D 14-31	36 45 43.1	76 33 10.9	3,720
Road crossing	36 45 00.6	76 33 42.6	5,008

Northwest along highways in northwest corner of quadrangle. (By J. J. Charters in 1918.)

Concrete culvert (located)	36 53 52.9	76 43 03.7	.....
T road north	36 54 11.7	76 43 17.3	2,206
Intersection of narrow-gage railroad and Isle of Wight-Bobs road	36 54 41.0	76 44 30.6	6,646
Crossroads	36 54 47.9	76 44 50.9	1,790

South along highways near west border of quadrangle.

Windsor, Prim. Trav. Sta. No. 8 (previously located)	36 48 28.9	76 44 42.5	.....
Center line of road, at first turn out of Windsor on road to Boaz	36 48 15.9	76 44 48.2	1,388
Center line of road, opposite C. F. Harris's mail box	36 47 47.2	76 44 48.7	2,892
Junction of double culvert and road in woods	36 47 37.0	76 44 41.5	1,182
T road southeast	36 46 52.4	76 44 45.9	4,512
T road east to farmhouse	36 46 30.8	76 44 43.9	2,189
Center of north end of small wooden bridge	36 45 24.8	76 44 57.6	.....
Junction of crossroads bearing east and west and north and south	36 45 06.0	76 44 52.2	1,939

SOUTH HILL QUADRANGLE.

Southwest along Southern Ry. through northeast quarter of quadrangle. (By J. C. Fales in 1918.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
130-foot trestle, at east end of, south rail.....	36 43 44.0	78 00 17.5	.....
Milepost 106, opposite and 8 feet north of.....	36 42 29.6	78 00 46.3	7,888
Overhead road crossing, under west edge of, north rail.....	36 42 13.0	78 01 15.7	2,920
Brodna, on north side of track, on west side of road-crossing at depot; iron post stamped "Prim. Trav. Sta. No. 17, 1918" ^p	36 42 19.8	78 01 57.8	3,492
Road crossing, north rail at.....	36 41 47.6	78 03 21.0	7,517
Milepost 110, south rail opposite.....	36 41 38.7	78 04 35.0	6,097
La Crosse, intersection of north rail of Southern Ry. and east rail of Seaboard Air Line Ry., at southwest corner of Southern Ry. station.....	36 41 48.7	78 05 37.4	5,181
La Crosse, 8 feet north of milepost 111; iron post stamped "Prim. Trav. Sta. No. 18, 1918".....	36 41 48.9	78 05 38.0	48

Southwest along Seaboard Air Line Ry. through northeast quarter of quadrangle.

Steel trestle, at south end of, east rail.....	36 44 42.8	78 03 35.1	.....
Overhead road crossing, west rail under north edge of.....	36 43 43.5	78 04 23.0	7,155
Milepost 77, center of track opposite.....	36 43 17.6	78 04 51.2	3,482
Milepost 78, east rail opposite.....	36 42 33.5	78 05 22.7	5,142
La Crosse, intersection of Seaboard Air Line and Southern rail-roads.....	36 41 48.7	78 05 37.4	4,684

Along highways. (By J. C. Fales in 1918.)

Crichton post office, north edge of road, opposite front door of J. R. Temple's store.....	36 40 17.0	78 00 47.2	.....
T road to Brodna.....	36 40 29.5	78 01 31.1	3,799
South end of timber highway bridge 40 by 18 feet, having railing both sides.....	36 41 09.6	78 01 49.2	4,314
Prim. Trav. Sta. No. 17, 1918 (previously described).....	36 42 19.81	78 01 57.77	7,130

SUFFOLK QUADRANGLE.

South on highways in northeast part of quadrangle. (By J. J. Charters in 1918.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
One-mile post.....	36 44 53.4	76 35 01.2	.....
Suffolk, at southwest corner of office of county clerk; iron post stamped "Prim. Trav. Sta. No. 5 P, 1918".....	36 44 16.5	76 34 58.4	3,740

West on Virginian Ry. near north border of quadrangle.

Road crossing.....	36 44 03.1	76 35 47.2	4,198
East end of wooden bridge No. 2 over narrow-gage railroad.....	36 44 00.1	76 36 22.8	2,913
Wooden bridge over tracks.....	36 43 52.6	76 37 27.6	5,330
Norfolk & Western Ry. span bridge over tracks of Virginian Ry. Opposite milepost N 27, near switch on north.....	36 43 51.1	76 37 41.6	1,144
Kenyon, 50 feet south of station; iron post stamped "Prim. Trav. Sta. No. 5, 1918 C." Elevation 72 feet.....	36 43 54.9	76 38 37.4	4,568
Road crossing.....	36 43 59.8	76 39 20.4	3,536
Bridge over deep cut, east end of.....	36 44 03.4	76 39 45.3	2,058
Road crossing.....	36 44 13.5	76 41 05.1	6,580
Road crossing.....	36 44 26.2	76 42 46.0	8,318
Road crossing.....	36 44 35.6	76 44 00.2	6,122
Road crossing, at edge of woods.....	36 44 41.7	76 44 48.6	3,990

Northwest on Norfolk & Western Ry. near north border of quadrangle.

Span bridge over tracks of Virginian Ry.....	36 43 51.1	76 37 41.6	.....
Block signal, concrete base marked "U. S. P. B. M".....	36 44 25.2	76 38 33.4	5,454
Road crossing, King road.....	36 44 54.4	76 39 17.8	4,666

SUFFOLK QUADRANGLE—Continued.

Along Southern Ry. near Suffolk. (By H. J. Switzer in 1917-18.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Suffolk, 1 mile east of, north rail of Southern Ry. at overhead crossing of east track of Virginian Ry.....	36 44 19.0	76 33 49.8	.....
Road crossing, near yard-limit sign.....	36 44 05.9	76 34 31.4	3,631
Suffolk, Main Street crossing.....	36 44 01.6	76 34 55.8	2,036
Suffolk, Prim. Trav. Sta. No. 5, 1918 (previously described)....	36 44 16.5	76 34 58.4	1,521

North along Norfolk Southern R. R. (By J. J. Phelan in 1918.)

North Carolina and Virginia State line, brass plate in granite monument on county road (Prim. Trav. Sta. No. 3).....	36 33 02.9	76 34 32.6	.....
Crossing of Suffolk highway.....	36 33 16.0	76 34 33.2	1,322
Road crossing, 877 feet south of milepost 12, west rail.....	36 34 07.8	76 34 38.4	5,253
Milepost 11, west rail.....	36 35 08.6	76 34 42.7	6,160
Point on north abutment of short low bridge across swamp.....	36 35 41.6	76 34 45.3	3,346
Cypress road crossing, 775 feet north of station.....	36 37 02.7	76 34 46.4	8,205
Point on north abutment of bridge across swamp.....	36 37 26.3	76 34 43.9	2,395
Saunders, 56 feet north of station, at road crossing.....	36 38 15.9	76 34 43.1	5,011
Road crossing at stone mill.....	36 38 35.0	76 34 45.7	1,949
Road crossing.....	36 38 52.0	76 34 48.1	1,722
Road crossing.....	36 39 11.2	76 34 50.7	1,960
Crismond flag station, road crossing at, east rail.....	36 39 43.2	76 34 55.3	3,256
Milepost 5 miles to Suffolk, east rail.....	36 40 19.8	76 35 06.1	3,801
Russell flag station, road crossing and blind side track at.....	36 41 09.8	76 35 17.2	5,140
Road crossing, west rail.....	36 41 52.8	76 35 12.6	4,368
Road crossing, east rail.....	36 42 51.6	76 34 45.0	6,358
Suffolk, crossing of Madison Street, east rail.....	36 43 21.3	76 34 39.1	3,045
Suffolk, northeast corner of intersection of Madison and Main streets, at stone crosswalk.....	36 43 27.2	76 35 03.9	2,100
Suffolk, 5 feet east and 15 feet north of intersection of Buck and Main streets.....	36 43 46.8	76 34 59.0	2,029
Suffolk, in yard of courthouse, at southwest corner of County Clerk's office; iron post stamped "Prim. Trav. Sta. No. 5 P, 1918".....	36 44 16.5	76 34 58.4	2,999

Northwest along highways.

Saunders, road crossing.....	36 38 15.9	76 34 43.1	.....
Saunders, in southwest corner of field, across from general store; iron post stamped "Prim. Trav. Sta. No. 2, 1918".....	36 38 17.4	76 34 45.9	280
On branch road west to Nurney, 40 feet west of center of Corapeake road.....	36 38 06.0	76 35 01.1	1,691
Center of crossroads.....	36 38 14.7	76 36 40.4	8,145

Southwest along Atlantic Coast Line R. R.

Nurney, at station, 2.5 feet from north rail of road crossing of Atlantic Coast Line R. R., on main track; iron post stamped "Prim. Trav. Sta. No. 4 P, 1918".....	36 38 32.6	76 36 50.2	1,962
Road crossing, northwest rail.....	36 38 15.4	76 37 09.2	2,322
Northeast end of bridge 86, northwest rail.....	36 38 01.8	76 37 24.4	1,855
Culvert 87, northwest rail.....	36 37 35.9	76 37 53.2	3,518
Harrell siding, road crossing, northwest rail.....	36 37 04.4	76 38 28.3	4,287
Milepost 29, northwest rail opposite.....	36 36 31.7	76 39 04.6	4,439
Road crossing, northwest rail.....	36 35 53.4	76 39 47.3	5,212
Whaley, 470 feet southwest of northeast end of station, at road crossing, northwest rail.....	36 35 30.5	76 40 12.7	3,104
Road crossing, northwest rail.....	36 35 06.4	76 40 39.4	3,273
Road crossing, northwest rail.....	36 34 45.5	76 41 02.7	2,842
Road crossing, northwest rail.....	36 34 33.2	76 41 16.4	1,671
Milepost 33, northwest rail.....	36 33 55.9	76 41 57.8	5,068

Magnetic declination for northwest part of quadrangle, 5.5° W.

SUFFOLK QUADRANGLE—Continued.

Southwest along Southern Ry. (By J. J. Phelan in 1918.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Suffolk, crossing of Madison Street.....	36	43	21.3	76	34	39.1	.....
Suffolk, junction of Atlantic Coast Line and Southern railroads, center line of Southern Ry. and east rail of Atlantic Coast Line R. R.	36	43	24.2	76	34	38.5	300
Road crossing, north rail.....	36	43	11.5	76	34	54.2	1,817
Road crossing, north rail.....	36	43	06.7	76	35	09.7	1,347
Road crossing, north rail.....	36	43	00.8	76	35	28.6	1,657
Road crossing, north rail.....	36	42	45.7	76	36	17.3	4,251
Road crossing, north rail.....	36	42	37.9	76	36	42.3	2,181
Northeast end of bridge A. D. 20.3 over swamp.....	36	42	30.0	76	37	09.2	2,333
Road crossing.....	36	42	26.1	76	37	43.7	2,832
Manning station, road crossing.....	36	42	18.5	76	38	55.8	5,921
East end of bridge, north rail.....	36	42	15.2	76	39	27.6	2,617
Road crossing, south rail.....	36	42	08.8	76	40	03.0	2,957
Northeast end of bridge, south rail.....	36	42	04.1	76	40	25.4	1,886
Road crossing, south rail.....	36	41	45.4	76	41	54.3	7,480
Road crossing, 24 feet west of milepost 25, south rail.....	36	41	42.9	76	42	06.5	1,025
Road crossing, south rail.....	36	41	31.7	76	42	59.8	4,490
East end of bridge, south rail.....	36	41	24.7	76	43	44.5	3,711
Road crossing, 1,300 feet east of east end of bridge, south rail.....	36	41	18.9	76	44	32.0	3,912

North along highways near west border of quadrangle.

T road north to Buckhorn.....	36	41	26.0	76	44	52.7	.....
Center of culvert under road, east of T road north.....	36	42	18.0	76	44	39.5	4,575
Buckhorn post office, at Purvis station, on Seaboard Air Line Ry. at crossing, north rail.....	36	43	24.4	76	44	10.6	7,119
North edge of road, 40 feet east of dilapidated negro dwelling.....	36	44	04.2	76	44	38.6	4,624
Boaz, 220 feet east of milepost 33, center of plank road crossing....	36	44	41.7	76	44	48.6	3,882

Magnetic declination for northwest corner of quadrangle, 5.5° W.

SURRY QUADRANGLE.

On highways in north part of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Powhatan Creek, center of wooden bridge over.....	37	14	56.7	76	46	22.0	.....
Nightingale's farm, gate in road leading into.....	37	14	54.1	76	51	29.8	.....
Chickahominy (2) triangulation station, situated on a sandy point forming the southeast side of mouth of Chickahominy River at its junction with James River. Farm on which the station is located is called "Piney Grove." The old station of 1870 is now about 100 feet outside of high-water mark. Search was made for it at low water, but nothing could be found. The station of 1910 is marked by a block of cement 5 inches square and 8 inches high with nail in center buried 3.5 feet deep. Over this was placed a 1910 cement monument, which projects 1 inch above ground. Three inches of sand separate the two cement marks.....	37	14	30.91	76	52	15.70	4,393

Magnetic declination for north part of quadrangle, 4° 55' W.

Northwest along highways in south part of quadrangle. (By J. J. Charters in 1918.)

Intersection of road bed of Surry Lumber Co.'s railroad and road.....	37	00	09.0	76	51	52.9	.....
T road east to farmhouse.....	37	00	50.6	76	52	24.2	4,918
Walls Bridge, west end of.....	37	01	26.4	76	52	36.2	3,742
Walls Bridge post office, 75 feet east of forks of road, in southwest corner of front yard of Mrs. Mollie Wilkinson just north of north end of bridge over Blackwater Swamp; iron post stamped "Prim. Trav. Sta. No. 182" (Bull. 245, p. 146).....	37	01	32.4	76	52	28.2	895

SURREY QUADRANGLE—Continued.

Northeast along highways in southeast corner of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Fect.
Milepost 9, opposite center of Smithfield-Ivor road.....	37	00	09.3	76	46	19.3	.....
Second-class T road north.....	37	00	48.6	76	45	56.6	4,382
Bobs, 25 feet north of road, old iron post stamped "Prim. Trav. Sta. No. 242, 1905".....	37	01	08.2	76	45	39.7	2,410
Bobs; iron post stamped "Prim. Trav. Sta. No. —, 1917." Elevation 89 feet.....	37	01	13.3	76	45	34.7	653

Along highways and Surry, Sussex & Southampton Ry. from southwest corner to northeast corner of quadrangle. (By Olinus Smith in 1917.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Fect.
Crossroads, in southeast corner of; iron post stamped "Prim. Trav. Sta. No. 132".....	37	00	47.5	76	59	39.6	.....
Center of road at creek crossing.....	37	01	13.0	76	58	42.2	5,326
Blackwater River, main channel of, center of truss bridge over.....	37	01	34.2	76	52	43.3	5,234
Dendron, road crossing south of.....	37	02	27.3	76	56	26.0	8,252
Dendron station, center of track opposite.....	37	02	45.5	76	55	52.5	3,286
Sexton post office, road crossing at.....	37	03	20.7	76	55	10.3	4,934
Sexton, 1 mile north of, 10 feet south of center of farm road, in west bank of railroad; iron post stamped "Prim. Trav. Sta. No. 1, 1917".....	37	03	55.2	76	54	12.1	5,863
Elboron station, road crossing at.....	37	04	33.3	76	53	10.6	6,305
Road crossing, second class.....	37	05	20.4	76	52	22.0	6,175
Moorings station, switchpost at, center of track.....	37	05	56.1	76	51	45.2	4,681
Road crossing, second class.....	37	06	57.2	76	50	55.0	7,398
Surry station, 1,800 feet south of, in railroad Y, 50 feet east of main track; iron post stamped "Prim. Trav. Sta. No. 2, 1917".....	37	07	59.0	76	50	04.7	7,461
Road crossing, second class.....	37	08	42.5	76	49	42.1	4,769
Road crossing.....	37	10	05.4	76	48	12.4	11,088
Crouch Creek, center of highway bridge over.....	37	10	36.4	76	46	56.0	6,939
Jones triangulation station; recovered the old station mark 14 feet back from edge of bluff and 2 feet below surface. Placed over it a cement monument, which projects 4 inches above the surface.....	37	10	08.946	76	45	51.759	5,895
Jamestown monument.....	37	12	31.48	76	46	39.90	14,933

Magnetic declination diagonally through quadrangle from southwest to northeast, 4° 50' W.

TAPPAHANNOCK QUADRANGLE.

South along highways near east border of quadrangle. (By E. L. McNair in 1916.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Fect.
Forks of road 2,000 feet north of Warsaw, road northwest to Ethel, road north to Lyell.....	37	57	48.6	76	45	19.4	(7,092)
Warsaw, in courthouse yard, 3 feet south of center of cement wall, about opposite post office and in line of street north; iron post stamped "Prim. Trav. Sta. No. 16, 1916".....	37	57	29.9	76	45	27.4	1,998
Road west.....	37	55	20.8	76	45	00.2	(6,692)
Road west.....	37	54	05.4	76	45	43.8	5,243
Wellfords wharf, about 800 feet north of, 240 feet west of road, 1 foot south of southeast corner of porch of house of A. W. Velano; iron post stamped "Prim. Trav. Sta. No. 17, 1916".....	37	53	16.3	76	45	51.8	5,009

Along highways near north border of quadrangle (east half).

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Fect.
T road corners southeast of Ethel post office.....	37	59	38.3	76	46	39.6	.....
T road west at Ethel post office.....	37	59	47.4	76	46	51.1	1,297
Mount Airy mill, center of bridge over mill race.....	37	58	59.1	76	47	52.5	6,931
Wooden draw-span bridge across Cat Point Creek, center of.....	37	59	02.3	76	48	35.9	3,488

TAPPAHANNOCK QUADRANGLE—Continued.

South along highways through center of north half of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	
Center of road, in line with road west.....	37	59	52.3	76	51	20.1	(2,559)
Draw bridge over Cat Point Creek, center of.....	37	58	28.7	76	51	14.8	8,471
T road south.....	37	57	54.2	76	50	12.0	6,116
Tie point at traverse line southwest.....	37	57	43.9	76	50	04.3	1,212

East along highways through center of northeast quarter of quadrangle.

Road forks, road southwest to Tappahannock Ferry, road west to Naylors.....	37	57	57.4	76	49	49.4	1,811
Crossroads, approximately in line with roads in each direction.....	37	58	06.0	76	48	02.8	8,585
Road forks.....	37	57	55.3	76	47	09.2	4,423
Prim. Trav. Sta. No. 16, at Warsaw.....	37	57	29.9	76	45	27.4	8,550

Magnetic declination near west border of quadrangle, 6° 10' W.; along north border of quadrangle, 6° 10' W.; through center of north half of quadrangle, 6° 06' W.; east through center of northeast quarter of quadrangle, 6° 13' W.

Along highways through east half of quadrangle from northwest to southeast.

Tappahannock Ferry, 800 feet N. 33° E. from ferry wharf on east side of river, 25 feet east of center of road, small cedar tree in wire-fence line; copper nail in root, not marked.....	37	57	00.5	76	50	43.4	5,399
Outer end of Tappahannock wharf, on center line about 750 feet from shore.....	37	55	53.4	76	51	16.1	7,278
Tappahannock Courthouse, in front of soldiers' monument, center of Main Street.....	37	55	42.0	76	51	36.5	2,001
Hoskins Creek, center of bridge over.....	37	55	02.8	76	51	32.4	3,977
T road west to Walkerton.....	37	53	41.6	76	52	21.1	9,091
Forks of road at cut-off, old road runs N. 40° W.....	37	52	57.9	76	51	57.6	4,804
Private road southeast.....	37	52	47.8	76	51	42.2	1,605
Piscataway Creek, center of draw bridge over.....	37	52	14.6	76	50	52.1	5,239
T road southwest.....	37	51	49.0	76	50	11.5	4,158
Dunnsville post office, 130 feet northwest of, 170 feet northwest of T road southeast and in line with T road southwest, 15 feet northwest of gate and 1 foot west of fence line, 20 feet northeast of center of road; iron post stamped "P. T. S. No. 21, 1916".....	37	51	33.8	76	49	21.3	4,312
Crossroads.....	37	51	03.2	76	48	26.0	5,402
Road northwest.....	37	50	37.8	76	48	09.9	2,874
Ozeana, forks of road at road northeast.....	37	49	35.0	76	48	06.4	6,358
T road east.....	37	49	04.4	76	47	50.7	3,345
Road west.....	37	48	26.8	76	47	33.5	4,048
Center of crossroads.....	37	48	17.7	76	46	45.2	3,979
Forks of road.....	37	48	08.0	76	46	01.6	3,631
Road southeast.....	37	47	13.9	76	45	07.8	6,979
Montague, T road southwest at church, 0.5 mile north of (tie point).....	37	46	11.1	76	45	03.9	6,354

Along highways in southeast corner of quadrangle.

Privateroad southwest to Dr. Hundley's residence.....	37	46	45.1	76	46	06.0	(6,059)
Road forks, T road northeast.....	37	46	59.5	76	46	28.8	2,333
T road north to Center Cross.....	37	47	00.9	76	46	48.9	1,615
Center of creek, at Birds Bridge, on line between Essex County and King and Queen County.....	37	46	18.8	76	47	23.7	5,085
Ino post office and store, 100 feet north of, 130 feet N. 62° W. from forks of road in front of store; copper nail in root of white-oak tree, painted "U. S. B. M. 15".....	37	45	45.5	76	47	54.8	4,104

Magnetic declination for east half of quadrangle, 6° 00' W.; for southeast corner of quadrangle, 5° 43' W.

TAPPAHANNOCK QUADRANGLE—Continued.**East along highways near south border of quadrangle.**

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
T road west, about 0.25 mile north of Greenwood store.....	37	45	13.2	76	59	36.6	.....
Walkerton, about 2.75 miles northeast of, 1 mile south of Bruington, at forks of road, in center of grass triangle, about in line with roads in three directions; iron post stamped "Prim. Trav. Sta. No. 24, 1916".....	37	45	20.6	76	59	26.7	1,087
Contra post office and store, crossroads at.....	37	45	38.8	76	59	41.5	.....
Road forks, private road southeast.....	37	45	52.6	76	59	34.1	1,510
Forks of road, road north.....	37	46	21.1	76	59	07.6	3,580
Forks of road, road south.....	37	45	56.8	76	49	09.8	5,471

Magnetic declination along south border of quadrangle, 5° 50' W.

North along highways near west border of quadrangle, south half.

Prim. Trav. Sta. No. 24.....	37	45	20.6	76	59	26.7	.....
Bruington post office and store, center of road opposite.....	37	46	23.4	76	59	30.2	6,359
T road east.....	37	46	49.1	76	59	29.4	2,597
Small creek, ford of.....	37	47	37.2	76	59	03.8	5,274
Road forks.....	37	48	16.0	76	58	47.0	4,154
Center of bridge over small creek.....	37	48	25.4	76	58	29.3	1,710
T road south near St. Pauls Church.....	37	49	43.1	76	58	08.2	8,036
Minor post office and store, 25 feet north and 50 feet west of T road corners at, 50 feet N. 6° 30' W. from corner of store building, 4 feet inside picket fence, on land of Mrs. V. A. Jones; iron post stamped "Prim. Trav. Sta. No. 33, 1916".....	37	50	22.4	76	58	58.9	5,680
Boulah Church, T road west at.....	37	51	54.9	76	58	40.7	9,463
Center of road, at bridge crossing waste outlet at mill.....	37	52	31.7	76	58	02.2	4,840
Road forks.....	37	52	41.8	76	57	49.9	1,420
Dunbrooke post office and store, T road west at.....	37	53	39.1	76	57	51.5	5,785
Prim. Trav. Sta. No. 27, 0.75 mile west of Dunbrooke.....	37	53	56.8	76	58	39.1	.....
T road south.....	37	53	51.1	76	59	51.4	5,822

Magnetic declination along west border of south half of quadrangle, 7° 00' W.

Along highways from about center to the northwest corner of quadrangle.

Tappahannock, soldiers' monument at.....	37	55	41.95	76	51	36.53	.....
T road corners.....	37	55	15.9	76	52	36.7	5,494
Road forks, wood road coming into main road at top of hill.....	37	55	37.2	76	53	34.9	5,135
Road forks, road south.....	37	56	18.6	76	54	36.9	6,503
T road north.....	37	56	23.8	76	55	18.0	3,332
Mount Landing post office, road forks at.....	37	56	35.7	76	55	32.3	1,662
Upper Mount Landing, T road north at.....	37	56	50.4	76	56	19.2	4,041
Center of bridge over small creek.....	37	57	44.4	76	56	12.0	5,500
T road northeast, at top of hill, opposite old church.....	37	58	08.7	76	56	20.8	2,557
Road forks, road north.....	37	58	53.5	76	57	09.1	5,951
Caret post office, opposite Crutchfields store, in center of triangle at forks of road; copper nail in root of red-oak tree, painted "U. S. B. M. 18".....	37	58	57.4	76	57	43.0	2,786
Road forks, road south.....	37	58	42.9	76	58	10.3	2,598
T road corners, roads north, south, and east.....	37	58	45.4	76	59	20.1	5,592
Road forks, in line of roads in three directions.....	37	59	14.3	76	59	33.9	3,120

Along highways near west border of quadrangle.

Rexburg post office, well about 125 feet north of.....	37	56	11.6	76	59	13.1	.....
Small creek, center of bridge over.....	37	55	12.2	76	58	58.9	6,122

TAPPAHANNOCK QUADRANGLE—Continued.

East along highways through center of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Dunbrooke, 0.6 mile northwest of, 30 feet south of main east-west road, 10 feet west of a byroad north through farms to Rexburg, 3 feet west of an old gatepost, across road from residence of E. E. Smith; iron post stamped "Prim. Trav. Sta. No. 27, 1916"	37 53 56.8	76 58 39.1	7,788
Dunbrooke post office and store, T road at.....	37 53 39.1	76 57 51.4	4,220
Crossroads.....	37 54 01.3	76 57 18.8	3,452
T road south.....	37 54 17.5	76 56 29.4	4,280
Road east.....	37 54 05.3	76 55 48.5	3,502
Road forks, at east end of grassy triangle.....	37 53 25.8	76 54 53.9	5,924
Road forks.....	37 53 07.3	76 54 00.2	4,701
Small creek, center of small wooden bridge over.....	37 52 37.5	76 53 49.8	3,119
T road east at Pauls Crossroads; a T road west is about 25 feet south.....	37 52 11.6	76 53 53.2	2,636
T road north.....	37 52 05.1	76 52 51.0	5,035
Road forks, in front of store, in line with roads.....	37 51 23.8	76 51 50.9	6,371
Essex Mill, center of bridge over mill race.....	37 51 38.2	76 50 41.6	5,741
Prim. Trav. Sta. No. 21, 1916.....	37 51 33.75	76 49 21.3	6,460

TOANO QUADRANGLE.

East along highways near north border of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Slaterville (Dash post office), T road northeast to Plum Point....	37 29 57.5	76 56 32.7	-----
Road forks.....	37 29 54.8	76 55 26.8	-----
Plum Point, southwest of, on back road to New Kent Courthouse, 5.25 miles east of Slaterville (Dash post office), at crossroads in woods, 18 feet south of intersection of roads; iron post stamped "Prim. Trav. Sta. No. 49, 1916"	37 29 54.8	76 51 54.9	-----
T road northeast.....	37 29 40.4	76 51 12.4	3,720
T road northwest.....	37 29 14.9	76 50 29.8	4,298

Magnetic declination along north border of quadrangle, 5° 00' W.

South along highways and Chesapeake & Ohio Ry. near east border of quadrangle. (By J. H. Wilson in 1916.)

Crossroads at schoolhouse, center of main road, in line with road northeast.....	37 29 34.9	76 48 56.1	-----
T road southeast.....	37 29 00.4	76 48 58.1	3,498
Crossroads.....	37 28 36.3	76 49 20.2	3,017
Road forks, just northwest of junction of telephone lines.....	37 27 45.0	76 50 21.9	7,184
Barhamsville, sign post at road forks.....	37 27 13.0	76 50 29.3	3,291
Barhamsville, about 1 mile south of, road forks at road northeast.	37 26 18.9	76 50 09.2	5,712
R. N. Farinholt's mail box, center of road opposite.....	37 25 24.3	76 49 34.5	6,190
Lane southwest, center of triangle at.....	37 24 30.8	76 49 11.3	5,730
Toano, road bridge over Chesapeake & Ohio Ry., 5 feet south of southeast corner of, at foot of telephone pole; iron post stamped "Prim. Trav. Sta. No. 50, 1916"	37 23 04.9	76 48 20.4	9,606
Milepost 46, center of east-bound track.....	37 22 47.6	76 47 16.7	5,434
Overhead wagon bridge, center of west-bound track under.....	37 22 40.2	76 46 34.4	3,495
Norge, road crossing at depot, east-bound track.....	37 22 08.9	76 46 08.4	3,802
Second-class road crossing, east-bound track.....	37 21 10.4	76 45 42.8	6,260
Lightfoot, opposite office window of depot, center of east-bound track.....	37 20 36.3	76 45 19.4	3,936
Road northwest at two mail boxes.....	37 16 12.4	76 45 18.9	-----
Five Forks, on embankment at south edge of road forks, at northeast corner of yard of Junction High School; iron post stamped "Prim. Trav. Sta. No. 51, 1916"	37 15 11.0	76 45 57.9	6,962

West along highways near south border of quadrangle.

T road north, 360 feet east of T road south.....	37 15 12.9	76 47 58.3	-----
Wooden bridge over small creek, center of.....	37 15 18.6	76 48 46.2	3,916
Crossroads, at southeast corner of, 2 feet southwest of C. B. Nightingale's mail box; iron post stamped "Prim. Trav. Sta. No. 52, 1916"	37 15 15.5	76 50 31.1	8,484

TOANO QUADRANGLE—Continued.

West along Chesapeake & Ohio Ry. through center of quadrangle.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Road crossing, 480 feet east of milepost 48, west-bound track.....	37	23	40.5	76	49	09.6	.....
Road crossing, west-bound track.....	37	23	21.7	76	50	07.8	5,070
Branch Siding, road crossing at, west-bound track.....	37	23	06.6	76	50	44.7	3,342
Diascund, road crossing just east of depot, west-bound track.....	37	23	39.9	76	52	14.6	7,998
Diascund Creek, center of railroad bridge 525 over, west-bound track.....	37	24	17.2	76	53	38.8	7,775
Lanexa, 60 feet east of southeast corner of depot, on south side of tracks, at west end of wire fence; iron post stamped "Prim. Trav. Sta. 53, 1916. Elev. 24 feet".....	37	24	16.2	76	54	41.4	5,053
Walker, road crossing at depot, west-bound track.....	37	24	56.8	76	56	25.2	9,327
Road crossing, about 850 feet west of milepost 57, west-bound track.....	37	25	31.7	76	58	09.6	9,129
Windsor Shades, in front of office window of depot, west-bound track.....	37	25	40.2	76	58	50.1	4,085

Along highways near west border of quadrangle.

Road forks, center of triangle at.....	37	20	45.4	76	59	38.3	.....
Road forks.....	37	20	13.0	76	59	33.0	3,304
Markles store, crossroads at.....	37	19	32.2	76	59	53.8	4,464
Sturgeon triangulation station, on Sturgeon Point opposite Kennons Marsh, on point of made land at brick works of Catu Mays, 50 feet northeast from present yacht wharf; octagonal sewer pipe with 2-inch iron pipe and point of spike within, all standing 2 inches above the surface.....	37	18	25.88	77	00	24.20	7,139

Magnetic declination for east border of quadrangle, 5° 09' W.; for south border of quadrangle, 5° 04' W.

URBANNA QUADRANGLE.

Northwest along highways. (By E. L. MacNair in 1916.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Ebenezer Baptist Church, at forks of road, at southeast corner of foundation of church; bronze tablet stamped "Prim. Trav. Sta. No. 173A".....	37	29	57.4	76	31	50.6	.....
Harper's store, 25 feet southeast of southeast corner of, center of road.....	37	30	13.8	76	31	26.9	.....
Olive Branch M. E. Church, center of road opposite.....	37	30	26.2	76	31	11.1	1,788
Olive Branch M. E. Church, 0.75 mile northeast of, T road east.....	37	30	37.0	76	30	36.1	3,027
T road corners, 15 feet southeast to mail box.....	37	31	10.2	76	30	18.5	3,642
Small creek, center of bridge over.....	37	31	46.9	76	30	43.9	4,240
Freeport store, 700 feet southwest of, 300 feet south of residence of R. H. Fairholt, just inside of yard fence, in line with road southwest, near lane leading to barn; iron post stamped "Prim. Trav. Sta. No. 1, 1916".....	37	32	23.0	76	30	27.2	3,898
Freeport, nail in plank on wharf, 20 feet west diagonally from outermost corner.....	37	32	24.0	76	30	12.7	1,166
Healys Mill, center of bridge over mill race.....	37	33	52.6	76	30	09.2	.....
Healy post office and store, T road at, 12 feet northeast to poplar tree.....	37	34	21.6	76	30	43.3	4,019
Locust Hill post office and store, 0.5 mile east of, 170 feet south and 64 feet west from fence corner of the Rappahannock school building; iron post stamped "Prim. Trav. Sta. No. 2, 1916".....	37	35	59.8	76	30	47.2	9,935
T road corners.....	37	36	05.4	76	31	03.1	1,406
Locust Hill post office and store, center of road opposite.....	37	36	05.7	76	31	11.3	660
Christ F. E. Church, center of front door.....	37	36	35.1	76	32	48.1	8,338
Urbanba, 2 miles southeast of, 18 feet west of center of Urbanba-Saluda road, in line with easterly road to Harmony, in front of old store building; iron post stamped "Prim. Trav. Sta. No. 3, 1916".....	37	36	05.0	76	33	59.0	6,468
Rosegill farm, opposite entrance to, center of road.....	37	37	26.1	76	34	07.2	8,233
Urbanba, center of drawbridge across Urbanba Creek at.....	37	37	55.2	76	34	19.9	3,112
Urbanba, R. S. Bristow's store, T road near.....	37	38	11.6	76	34	30.0	1,854
T road southwest, on main road from Urbanba to Church View.....	37	38	18.4	76	35	16.7	3,823
T road northeasterly (second class).....	37	38	33.0	76	35	45.3	2,735

URBANNA QUADRANGLE—Continued.

Northwest along highways—Continued.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Pine Tree store, 150 feet east of, 10 feet southwest of center of road, in root of gum tree which has signboard marked "Urbanna and Church View;" copper nail and washer, tree painted "U. S. B. M. 2".....	37	39	05.3	76	36	33.8	5,088
T road south (second class).....	37	38	48.2	76	37	41.2	5,700
T road north.....	37	38	42.4	76	37	58.1	1,473
Warner post office and store, 2.5 feet east of corner of platform in front of, 22 feet north of gum tree near road; iron post stamped "Prim. Trav. Sta. No. 4, 1916".....	37	38	19.6	76	38	43.2	4,303
Oak tree at road forks, in triangle of three roads.....	37	38	35.0	76	39	13.8	2,914
Forks, 15 feet south of east and west road, in line of road about south.....	37	38	20.8	76	40	04.4	4,302
T road corners, road north to Church View, driveway south to private house, east and west road between Warner and Mascot. Forks of road, 20 feet northeast of cedar tree.....	37	38	34.3	76	40	34.4	2,775
Driveway north to farmhouse, center of road opposite.....	37	34	22.7	76	44	45.3	6,624
Negro church, center of road in front of.....	37	35	20.2	76	44	05.9	2,288
East side of road at angle, opposite lane north to house, in root of large white-oak tree; copper nail and washer, painted "U. S. B. M. 4".....	37	35	38.5	76	43	49.6	2,554
Road forks.....	37	37	03.5	76	43	45.1	1,080
Road forks.....	37	36	12.5	76	43	37.8	3,134
Road forks, east to Mascot and south to Elsom, in root of small white-oak tree; copper nail.....	37	36	41.7	76	43	51.0	2,552
Mascot post office and store, 0.6 mile southwest of, 15 feet south of road, in front of Tureman's house, in root of cedar tree; copper nail, painted "U. S. B. M. 6".....	37	37	01.5	76	44	10.7	6,338
Mascot post office and store, at west end of platform, 1.5 feet from corner of store, 30 feet north of crossroads; iron post stamped "Prim. Trav. Sta. No. 5, 1916".....	37	37	16.5	76	42	54.2	3,133
Piankatank River, east end of bridge across.....	37	37	38.0	76	42	26.2	4,074
	37	38	01.3	76	41	44.9	

Magnetic declination for south half of east side of quadrangle, $5^{\circ} 59' W.$; east and west through middle of quadrangle, $5^{\circ} 36' W.$; for south half of west side of quadrangle, $5^{\circ} 24' W.$

West along highways on north border of quadrangle. (Checked spur line.)

Whites Chapel (brick church), T road corners at.....	37	44	44.7	76	33	10.9	(3,885)
T road west.....	37	44	35.9	76	33	02.9	1,098
Monaskon post office, about 70 feet northwest of, in open, smooth grass plat, 140 feet west of end of wharf; iron post stamped "Prim. Trav. Sta. No. 10, 1916".....	37	44	07.5	76	34	06.7	5,882

Magnetic declination along west border of quadrangle, $5^{\circ} 40' W.$

Southwest along highways in northwest quarter of quadrangle.

Temporary bench mark 14, forks of roads, about 40 feet south and 20 feet east of, in triangle formed by roads; copper nail in root of white-oak tree, painted "U. S. B. M. 14".....	37	44	16.5	76	40	12.9	(4,689)
Road northwest.....	37	43	49.5	76	40	49.8	4,030
Crossroads, in line with road southeast.....	37	43	18.3	76	43	09.9	(947)
Crossroads, road southwest through gate; second-class road southeast through woods.....	37	42	22.6	76	42	50.2	(5,848)
Road forks, road east.....	37	41	03.1	76	43	33.5	8,759
Piscataway Creek, center of Wares bridge across, on Middlesex County and King and Queen County line.....	37	41	01.4	76	43	36.8	314

Along highways southeast through northwest quarter of quadrangle.

T road west.....	37	44	24.8	76	43	22.0	(6,182)
T road southwest to Dragonville (tie point).....	37	43	27.7	76	43	11.1	5,839
Forks of road near colored church, road about west.....	37	43	17.9	76	42	42.5	2,502
Jamaica post office and store, T road corner 100 feet north of (tie point).....	37	42	55.2	76	41	38.1	6,721
Road southwest.....	37	42	22.4	76	41	15.5	3,786
Crossroads, in line with road northeast to Waterview.....	37	41	33.7	76	41	10.0	4,946

URBANNA QUADRANGLE—Continued.

Along highways southeast through northwest quarter of quadrangle—Continued.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Church View, T road at, 200 feet east of new store.....	37	40	40.4	76	40	45.8	5,733
Center of road, at small creek, no bridge.....	37	40	27.5	76	40	17.0	.....
Center of road, in front of Mt. Zion colored church.....	37	40	18.6	76	40	01.4	1,552
Evans store, 60 feet west of, 10 feet east of road going north to Waterview, double red-oak tree; copper nail and washer between the two trees, painted "U. S. B. M. 7".....	37	40	14.6	76	39	19.8	3,364
Lagrange Mill, center of bridge over spillway outlet of dam, 120 feet east of.....	37	39	52.4	76	38	25.5	4,913
Streets post office and store, T road northeasterly.....	37	39	38.2	76	37	08.8	6,330
T road northeast.....	39	39	17.6	76	36	50.6	2,553

Along highways near west border of quadrangle.

Road forks, at north end of triangle formed by roads.....	37	40	11.9	76	44	17.3	5,342
Road forks, road south to Velma, road west to Ware's Church.....	37	39	42.8	76	43	54.7	3,459
Road forks, at west end of triangle formed by roads, station is in line with road southwest to Little Plymouth and road north to Coldwater.....	37	39	16.3	76	44	04.5	2,782
Crossroads, second-class roads northeast and southwest through fields.....	37	38	58.5	76	43	13.0	4,515
Velma store and post office, 40 feet southeast of, 20 feet west of road, on root of white-oak tree; copper nail and washer, tree painted "U. S. N. M. 16".....	37	38	46.7	76	42	46.7	2,423
Road forks, road west to Shanghai.....	37	38	23.3	76	43	08.5	2,948
Road crossing, private roads east and west to farm houses.....	37	37	56.6	76	42	49.7	3,090

Magnetic declination for northwest quarter of quadrangle, 5° 33' W.; for west border of quadrangle, 5° 35' W.

VIRGINIA BEACH QUADRANGLE.

East along highways and north along electric road. (By F. J. McMaugh in 1917.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Fork in road, 55 feet east of small bridge over ditch.....	36	46	48.9	75	59	28.0	.....
Culvert, marked Sta. 413 + 828.....	36	47	03.2	75	58	47.1	3,622
Center of road opposite old gate.....	36	47	04.5	75	58	06.6	3,296
T road south.....	36	47	03.0	75	58	00.7	504
Middle of bridge at temporary bench mark 5.6.....	36	47	00.8	75	57	51.2	805
Dam Neck Life Saving Station, at northeast corner of concrete runway, 2 feet south of north edge and 3 feet west of east edge; iron post stamped "Prim. Trav. Sta. No. 9." Elevation 10 feet. Azimuth to nail in post 153° 23' 40".....	36	47	14.1	75	57	32.6	2,024
Stake on bank, about 300 feet south of concrete house.....	36	47	53.6	75	57	42.3	4,068
Post at Atlantic Avenue and Churchill Street.....	36	48	28.6	75	57	52.5	3,632
East rail, opposite fourth trolley pole from point of curve.....	36	48	57.8	75	58	06.4	3,165
Railroad trestle, line 2 feet west of east rail.....	36	49	50.2	75	58	18.0	5,387
Lake station, switch point north of.....	36	50	24.5	75	58	28.0	3,561
Steel water tank.....	36	50	47.7	75	58	47.5	2,828
Virginia Beach, Flag Pole triangulation station, Life Saving Station No. 2, U. S. Coast and Geodetic Survey.....	36	51	08.49	75	58	32.97	2,413

Magnetic declination for quadrangle, 5.8° W.

WELLVILLE QUADRANGLE.

East along highways near south border of quadrangle. (By J. C. Fales in 1918.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Road fork north.....	37	00	05.2	77	57	00.1	.....
Creek crossing.....	37	00	16.6	77	56	23.3	3,206
Road fork to unpainted house 500 feet south.....	37	00	19.0	77	56	01.4	1,789
Creek crossing, 600 feet east of colored schoolhouse.....	37	00	31.5	77	55	33.2	2,615
Crossing of road to Harper's home with a road from Blackstone; hub at northwest corner of.....	37	00	35.1	77	54	48.2	3,667
Road to house of Junius Wells, west edge of, 95 feet north of wooden gate in woven-wire fence.....	37	00	27.9	77	54	00.6	3,923
T road to two-story white house 200 feet south.....	37	00	19.3	77	53	26.4	2,910
T lane to two-story white house 1,000 feet south, three metal mail boxes at T.....	37	00	08.8	77	53	03.5	2,135
Bridge, wooden, with railings, 16 by 40 feet, west end of.....	37	00	14.8	77	51	13.4	.....
T road to house of R. A. Eckels 200 feet north.....	37	00	20.8	77	50	52.7	1,785

Magnetic declination for south border of quadrangle, 4° 17' W.

WHITE PLAINS QUADRANGLE.

South along highways near east border of quadrangle. (By J. C. Fales in 1918.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Road, opposite wagon gate at old Hall place.....	36	43	59.9	77	46	19.9	.....
T road to two-story gray house 300 feet east.....	36	43	33.7	77	45	30.7	4,802
Road, opposite wooden gate in woven-wire fence to farm buildings on west side of road.....	36	41	12.9	77	45	11.2	.....
Road, opposite wooden gate to large old house 500 feet east.....	36	40	20.5	77	45	40.3	5,804
Fitzhugh post office, at intersection of Emporia-Lawrenceville and Edgerton-Triplett roads, at northwest corner of residence plat of W. J. Ferguson; iron post stamped "Prim. Trav. Sta. No. 19, 1918".....	36	39	56.5	77	45	52.4	2,620
T road to church 100 feet west.....	36	39	23.9	77	46	21.0	4,039
T road west.....	36	38	27.2	77	46	59.9	6,553
T road northeast to farm buildings.....	36	38	04.3	77	46	30.3	3,345
Wooden bridge, 20 by 14 feet, north end of.....	36	37	24.1	77	46	11.1	4,358
Triplet post office, opposite Chambliss store road.....	36	36	37.9	77	45	58.8	4,781
Wooden bridge, 90 by 14 feet, southwest corner of.....	36	35	32.3	77	45	03.2	6,635
Hub on east side of road, opposite cottage of Z. B. Williams.....	36	35	06.3	77	45	11.4	2,718
Road, opposite house of B. H. Carpenter.....	36	34	33.1	77	45	57.0	3,557
Timber bridge, 10 by 12 feet, middle of.....	36	34	29.8	77	45	07.9	4,018

Magnetic declination for east border of quadrangle, 3° 50' W.

Southwest along Southern Ry. through northwest corner of quadrangle. (By J. C. Fales in 1918.)

Milepost 100, south rail opposite.....	36	44	27.1	77	55	57.5	.....
Meherrin River bridge, at east end of trestle approach, south rail.....	36	44	05.0	77	56	51.2	4,906
Road crossing.....	36	44	08.4	77	57	36.8	3,725
Farm crossing, seventh joint in south rail west of.....	36	43	54.0	77	58	59.4	6,879

South and southwest along highways. (By J. C. Fales, in 1918.)

Prim. Trav. Sta. No. 16, 1918 (previously described in Lawrenceville quadrangle).....	36	45	22.9	77	51	03.4	.....
Point on entrance road to red brick house, 40 feet from center line of county road.....	36	44	18.6	77	51	13.4	6,564
Fork in road, at sign marked "2 miles to Main Street Garage".....	36	44	06.7	77	50	50.0	2,256
T road south to two-story house.....	36	43	59.3	77	50	24.8	2,181
Meherrin River, south end of steel bridge over.....	36	43	00.6	77	49	53.9	6,446
T road southeast to Emporia, 220 feet southwest of hub at bend, in road where lane runs northeast.....	36	42	49.7	77	49	51.7	1,115

WHITE PLAINS QUADRANGLE—Continued.

South and southwest along highways—Continued.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Sign on north side of road, marked "5 miles to Main Street Garage," south edge of road opposite.....	36	42	39.9	77	50	31.6	3,399
T road east to two-story house 800 feet from road.....	36	41	46.5	77	51	20.4	6,704
Fork in road, second-class road southwest.....	36	41	19.7	77	51	27.3	2,766
White church 150 feet west of road, point on road in line with south face.....	36	40	13.5	77	51	58.9	7,179
Point in road, opposite small gate in picket fence, at front entrance to white house with red trimmings 150 feet west of road.	36	39	33.9	77	52	05.0	4,028
Brunswick (Ezells store), 80 feet east of, east of crossroads; iron post stamped "Prim. Trav. Sta. No. 24, 1918".....	36	38	51.4	77	52	14.8	4,379
Gholsonville post office, opposite front door of Valentine & Wesson's store, west edge of road.....	36	38	52.1	77	53	32.2	6,305
T road to log cabin, 350 feet north of road.....	36	38	20.9	77	54	35.8	6,068
Point in road, in line with west wall of unpainted store building 200 feet north of road.....	36	37	56.5	77	55	30.9	5,127
Fork in road, road west past front of negro church 500 feet from main road.....	36	37	47.6	77	56	21.7	4,235
South edge of road, at corrugated iron pipe culvert having C. M. King written in head wall.....	36	38	09.1	77	57	48.1	7,372
T road to unpainted house 120 feet south of road.....	36	38	10.9	77	58	29.4	3,374
Meherrin Church (colored), opposite front door of, point in road	36	38	36.8	77	58	38.0	2,710
T road to Vernon Bassett's house 250 feet east of road.....	36	39	08.2	77	59	06.7	3,948
Second-class crossroad, unpainted house west, white house east	36	39	36.9	77	59	11.3	2,927
Crossing of old and new roads.....	36	39	56.1	77	59	20.7	2,085
Second-class T road east past well, 40 feet east of road.....	36	40	00.4	77	59	44.7	2,003

North along highways. (By H. J. Switzer in 1918.)

Farm road east.....	36	32	54.8	77	56	30.1	.....
Farm road east.....	36	33	25.4	77	56	29.1	3,094
Logging railroad crossing.....	36	33	44.6	77	56	32.4	1,965
Logging railroad crossing.....	36	34	16.6	77	56	36.7	3,245
Intersection of Elams-White Plains and White Plains-Gasburg roads.....	36	35	17.6	77	56	53.6	6,324
South end of concrete culvert.....	36	36	01.7	77	57	26.4	5,196
South end of concrete culvert.....	36	36	41.8	77	57	04.5	4,436
South end of concrete culvert.....	36	37	21.0	77	57	13.3	4,016
Culvert (previously described).....	36	38	09.1	77	57	48.1	5,632

(By J. C. Fales in 1918.)

Prim. Trav. Sta. No. 24, 1918 (previously described).....	36	38	51.4	77	52	14.8	.....
T road to gray bungalow 200 feet south of main road.....	36	38	48.5	77	51	29.7	3,687
East end of timber bridge having concrete abutments.....	36	38	42.3	77	50	46.8	3,559
Second-class T road south.....	36	38	51.3	77	49	36.2	5,825
South point of Y at road south, "Metal Shoe" advertisement on 15-inch pine tree at south west corner of intersection.....	36	39	08.8	77	49	12.3	2,631
Point in road, opposite woven-wire gate at road to unpainted barn 250 feet south of road.....	36	40	01.3	77	48	31.4	6,280
Junction of Lawrenceville-Emporia road with road from Brunswick.....	36	40	06.6	77	47	54.4	3,062
Crossing of Emporia-Lawrenceville road and Camp Manufacturing Co.'s logging railroad.....	36	39	57.5	77	47	28.8	2,279
Prim. Trav. Sta. No. 19, 1918 (previously described).....	36	39	56.47	77	45	52.33	7,867

Magnetic declination for center of quadrangle, 3° 43' W.; for south border of quadrangle, 4° 22' W.; for west border of quadrangle, 4° 33' W.; for east border of quadrangle, 4° 33' W.

See also Emporia quadrangle.

WILLIAMSBURG QUADRANGLE.

South along Chesapeake & Ohio Ry. and highways in southwest portion of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
Milepost 242, east-bound track opposite.....	37	20	08.2	76	44	52.7	.....
E well, road crossing at section house, east-bound track.....	37	19	19.6	76	44	10.2	5,991
Road crossing, at James City County and York County line, east-bound track.....	37	18	09.0	76	43	39.2	7,569
Road crossing, east-bound track.....	37	17	26.1	76	43	20.4	4,600
Road forks, at road southeast.....	37	17	02.0	76	44	08.0	4,550
Road east, center of main road in line with, large oak tree stands in triangle.....	37	16	33.3	76	44	19.5	3,048
Colored schoolhouse No. 2, James City County, opposite door of, center of road.....	37	16	23.2	76	44	37.4	1,773

Magnetic declination for southwest part of quadrangle, 4° 55' W.

Along highways. (By J. J. Charters in 1918.)

Williamsburg, 1 mile south of, 442 feet west of Chesapeake & Ohio Ry. crossing, 100 feet north of T road to Kings Mill Bluff; iron post stamped "Prim. Trav. Sta. No. 1".....	37	16	00.12	76	40	53.05	.....
Stake in ground, 5 feet north of new telephone pole, temporary bench mark.....	37	15	36.88	76	40	57.68	2,380
T road west.....	37	15	26.53	76	41	09.69	1,428
Outlet to lake, center of bridge over, in wooden planking; nail. Grove station, about 2 miles northwest of, 50 feet from railroad crossing, 15 feet north of west-bound track; iron post stamped "Prim. Trav. Sta. No. 6, 1918".....	37	15	07.05	76	39	46.00	.....
T road east.....	37	15	31.73	76	39	11.47	1,748
T road (previously described).....	37	15	38.14	76	39	52.38	3,370
Blazed tree marked "U. S. P. T. Sta.," 5 feet east of; stake with nail in top.....	37	15	01.70	76	38	02.68	.....
Creek running east, crossing of.....	37	15	03.02	76	37	58.68	352
T road northwest (previously described).....	37	15	19.68	76	37	55.43	1,705
Stone monument marked "W. A.".....	37	15	11.68	76	39	47.93	.....
T road northeast.....	37	15	14.90	76	39	49.23	341
Railroad crossing, on branch of Chesapeake & Ohio Ry., south rail.....	37	15	34.57	76	39	51.51	1,988
T road.....	37	15	38.14	76	39	52.38	368
T road south.....	37	15	47.05	76	39	55.67	939
T road north at L. C. White's mail box.....	37	15	50.55	76	39	57.54	385
T road west.....	37	15	57.31	76	40	25.62	2,371
T road southwest.....	37	15	56.27	76	40	45.50	1,610
Prim. Trav. Sta. No. 1 (previously described).....	37	16	00.12	76	40	53.05	723
Intersection of crossroads, at 11 mail boxes.....	37	15	06.04	76	37	15.39	.....
T road north.....	37	15	08.50	76	37	27.34	997
Temporary bench mark; elevation 68.4 feet, point in road opposite.....	37	15	09.26	76	37	42.14	1,198
Road south near temporary bench mark; elevation 85.6 feet.....	37	15	12.41	76	37	47.84	561
Road northwest.....	37	15	19.68	76	37	55.43	957
T road southeast.....	37	15	25.10	76	38	14.06	1,603
T road south.....	37	15	29.46	76	38	20.28	668
T road north.....	37	15	33.64	76	38	26.82	677
T road northwest to house.....	37	15	37.94	76	38	39.88	1,141
Dupont powder mill, on branch railroad to, 15 feet southeast of south rail, 25 feet southeast of crossroads; iron post stamped "Prim. Trav. Sta. No. 11, 1918".....	37	15	40.58	76	38	52.88	1,084

Magnetic declination for south border of quadrangle, 5.5° W.

YORKTOWN QUADRANGLE.

CAMP ABRAHAM EUSTIS.

Along highways. (By J. J. Charters, in 1918.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Fect.</i>
Iron post, 30 feet west of road, 400 feet south of house in field; iron post stamped "Prim. Trav. Sta. No. 2".....	37	14	40.19	76	40	47.05	.....
Second-class T road west through woods.....	37	14	36.74	76	40	43.08	475
Concrete culvert with sewer-pipe drains.....	37	14	13.85	76	40	22.07	2,872
Kings Mill, near ruin of, at right angle in road; stake with nail in top, marked "t. b. m.".....	37	14	10.29	76	40	21.82	361
Kings Mill Bluff, 20 feet from edge, in first open field east of Kings Mill wharf; iron post stamped "Prim. Trav. Sta. No. 3 C".....	37	13	23.28	76	40	02.66	5,001
Center of creek, 20 feet east of east water line of James River.....	37	13	21.85	76	39	38.91	1,926
Stake, 50 feet from edge of river, 15 feet southeast of tree marked "Posted J. D. Lewis".....	37	13	16.63	76	39	05.49	2,754
J. D. Dunn's house, 200 feet south of, 0.25 mile south of main road, 60 feet north of north end of ravine; iron post stamped "Prim. Trav. Sta. No. 4".....	37	13	21.96	76	39	03.76	557
Second-class road north and south.....	37	13	48.54	76	38	58.98	2,715
T road south along wire fence.....	37	14	10.59	76	39	01.92	2,243
Grove station, 0.75 mile west of, at intersection of T road; 30 feet north of large oak tree; iron post stamped "Prim. Trav. Sta. No. 5, 1918 C".....	37	14	20.76	76	38	59.90	1,042
T road east.....	37	14	22.38	76	39	07.96	672
T road west opposite temporary bench mark.....	37	14	24.82	76	39	11.29	365
T road.....	37	14	27.29	76	39	14.98	389
T road west.....	37	14	28.60	76	39	16.87	201
T road west.....	37	14	36.62	76	39	25.53	1,071
T road west.....	37	14	38.87	76	39	28.00	303
T road west.....	37	14	41.01	76	39	30.45	293
T road west-southwest.....	37	14	52.88	76	39	37.14	1,317
Prim. Trav. Sta. No. 5, 1918 (previously described).....	37	14	20.76	76	38	59.90	.....
Road forks.....	37	14	40.01	76	38	53.76	2,010
Crossroads.....	37	14	39.09	76	38	47.06	551
Center of road, 4 feet from old pine log, near witness stake 5 feet high; stake with nail in top.....	37	14	42.20	76	38	40.81	598
T road south.....	37	14	47.33	76	38	18.64	1,869
Prim. Trav. Sta. No. 5 (previously described).....	37	14	20.76	76	38	59.90	.....
Grove station, 85 feet east of railroad crossing, on east-bound or south track.....	37	14	13.44	76	38	06.41	4,389
T road northeast.....	37	14	06.32	76	37	51.02	1,438
T road west.....	37	14	02.83	76	37	46.77	493
T road east.....	37	13	56.65	76	37	40.76	792
T road east.....	37	13	47.71	76	37	37.46	943
T road west.....	37	13	35.25	76	37	42.69	1,329
T road north.....	37	13	24.79	76	37	38.50	1,111
T road east.....	37	13	08.38	76	37	29.55	1,811
Schoolhouse, 300 feet from, near S. A. Lee's mail box, 15 feet east of T road; iron post stamped "Prim. Trav. Sta. No. 7, 1918 C".....	37	13	02.90	76	37	22.39	801
T road north to old deserted white house.....	37	12	45.97	76	37	50.89	2,871
Grove triangulation station of U. S. Coast and Geodetic Survey, about 5 miles on north side of James River, nearly north of Deepwater Shoals Lighthouse, on an estate known as "The Grove" owned by Young B. Choals, on bluff about 100 yards west of ravine, 0.25 mile west of Mr. Choals's house; marked with neck of bottle 4.5 feet below surface, over this an iron screw pile, center marking point, over this a cedar stub, top 8 inches above surface, marked with copper tack, in back range to Deepwater Lighthouse.....	37	12	30.068	76	37	56.661	1,674
Line post of York and James City counties, 50 feet from, 30 feet south of south rail of east-bound track of Chesapeake & Ohio Ry., 15 feet west of road; iron post stamped "Prim. Trav. Sta. No. 9, 1918".....	37	13	58.01	76	37	38.04	.....
T road south.....	37	14	04.76	76	37	24.58	1,286
T road east.....	37	14	12.37	76	37	23.47	775
T road southeast.....	37	14	26.01	76	37	23.53	1,380
A. Williams's mail box, 100 feet east of, 100 feet southwest of old deserted shack, in triangular grass patch at intersection of three roads; iron post stamped "Prim. Trav. Sta. No. 10, 1918".....	37	14	48.64	76	37	08.55	2,590

Magnetic declination for north border of quadrangle, 5.5° W.

YORKTOWN QUADRANGLE—Continued.

Northeast along highways near center of quadrangle. (By J. C. Fales in 1918.)

Station.	Latitude.	Longitude.	Distance between stations.
Crawford triangulation station of U. S. Coast and Geodetic Survey, on north side of James River, bears about southeast from Deepwater Shoals Lighthouse, distant 1.25 miles, near Mulberry Point, on rampart near westernmost angle of a large earth fort called Fort Crawford, land belongs to Mr. Crawford, and his dwelling house stands inside the fort. Station is marked with neck of a bottle 5 feet below surface, over this is a locust stub 5 feet long, 9 inches in diameter, top marked with copper tack and flush with surface of rampart; distance from station to outer angle of rampart is 105 feet, distance to inner angle, 97 feet; recovered in 1910.	37° 07' 43.89"	76° 37' 12.42"	Feet.
Fort Crawford, 0.4 mile northeast of, 50 feet west of road, 8 feet north of gate to second-class road, which leads west to farm; iron post stamped "Prim. Trav. Sta. No. 11, 1918. Elev. 4 feet".....	37° 08' 02.95"	76° 36' 54.39"	2,418
North rut in road, in front of gate at entrance leading to white house 200 feet north of road.....	37° 08' 08.06"	76° 36' 47.43"	764
Hub at intersection whence woods road leads east.....	37° 08' 13.37"	76° 36' 37.90"	940
Center line of main road, at T whence crossroads lead northerly. At south fence of main T whence road leads north from main road; 2 by 4 inch hub with copper nail and washer.....	37° 08' 23.68"	76° 36' 23.02"	1,592
Mulberry Island post office, 1.76 miles northeast of, southeast corner of T road east; iron post stamped "Elev. 9 feet. Prim. Trav. Sta. No. 8, 1918".....	37° 08' 25.03"	76° 36' 15.19"	649
Center line of road, at T whence woods road leads west.....	37° 08' 36.31"	76° 36' 16.93"	1,149
Main road, at center line of T road southwest.....	37° 08' 45.29"	76° 36' 19.55"	933
Center of road, opposite center line of road to white house 100 feet south of road.....	37° 08' 55.71"	76° 36' 12.11"	1,214
Mulberry Island post office, 2.37 miles northeast of, southeast side of road, opposite center line of T road northwest; iron post stamped "Elev. 7 feet. Prim. Trav. Sta. No. 6, 1918".....	37° 08' 57.73"	76° 36' 04.82"	624
Center line of main road, at center line of T road north.....	37° 08' 58.02"	76° 35' 58.51"	510
Center line of main road, opposite center line of T road north through wooden gate in barbed-wire fence.....	37° 09' 02.75"	76° 35' 49.54"	869
Lee Hall, 3.41 miles south of, 2.89 miles north of Mulberry Island post office, in north corner of T road northwest, 2 feet south offence-corner post at entrance to Minstead's farm; iron post stamped "Elev. 30 feet. Prim. Trav. Sta. No. 4, 1918".....	37° 09' 06.70"	76° 35' 36.97"	1,093
Center line of woods road, at intersection of center line of nearly obliterated wagon trail which forks to the north at this point; hub with copper nail and washer.....	37° 09' 11.28"	76° 35' 31.25"	654
Center line of road, 60 feet north of front door of white house of J. C. Wallace 30 feet east of road, hub is 8 feet west.....	37° 09' 04.26"	76° 35' 24.00"	921
Intersection of center line south of two woods roads, 12 feet southwest of; copper nail and washer.....	37° 09' 12.69"	76° 34' 59.66"	2,147
Northeast corner of T road; iron post stamped "Prim. Trav. Sta. No. 5, 1918".....	37° 09' 12.06"	76° 34' 41.95"	1,436
Intersection of center line at T of new road.....	37° 09' 11.84"	76° 34' 30.42"	933
Center line of T road east.....	37° 09' 19.13"	76° 34' 31.02"	738
Peak at top of sawdust pile 35 feet high.....	37° 09' 27.05"	76° 34' 29.76"	807
T road south, 40 feet east of, on south side of road, 200 feet east of church.....	37° 09' 41.55"	76° 34' 29.78"	1,467
Old earthworks, 1.23 miles south of, at northwest corner of T road fork, opposite administration building whence road leads west to Barley farm; iron post stamped "Prim. Trav. Sta. No. 1, 1918. Elev. 34".....	37° 09' 54.62"	76° 34' 40.89"	1,599
Center line of road, opposite small gate at entrance to light blue house 200 feet east of road.....	37° 09' 47.42"	76° 34' 53.98"	1,286
Center line of main road at T road south.....	37° 10' 04.15"	76° 34' 33.22"	2,385
Old earthworks, 1.2 miles south of Lee Hall, at northeast corner of intersection of Newport News-Lee Hall road with Mulberry Island road, at foot of signpost; iron post stamped "Prim. Trav. Sta. No. 30, elev. 40, 1918".....	37° 10' 19.59"	76° 34' 18.20"	1,979
	37° 10' 37.08"	76° 34' 11.71"	1,845

Magnetic declination for center of quadrangle, 5.5° W.

Checked spur line from Primary Traverse Station No. 1 to Primary Traverse Station No. 2. (By J. C. Fales in 1918.)

Prim. Trav. Sta. No. 1.....	37° 09' 47.42"	76° 34' 53.98"	.....
Old earthworks, 1.23 miles southwest and 1.53 miles west of, 250 feet south of house near bridge, on bank of James River; iron post stamped "Prim. Trav. Sta. No. 2, 1918. Elev. 21".....	37° 09' 54.36"	76° 36' 23.05"	7,244

YORKTOWN QUADRANGLE—Continued.

From Primary Traverse Station No. 4 northwest to Primary Traverse Station No. 3, thence south to Primary Traverse Station No. 8.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	Feet.
Prim. Trav. Sta. No. 4 (previously described).....	37	09	11.37	76	35	31.34	.....
Old earthworks, 2.19 miles southwest and 0.8 mile west of, at Milstead's farm, 100 feet southwest of farmhouse, in angle of wire fence; iron post stamped "Prim. Trav. Sta. No. 3. Elev. 25, 1918".....	37	09	35.83	76	36	12.78	4,172
Mulberry Island post office, 2.17 miles northwest, thence 0.41 mile west of, about 1,000 feet east of bank of river, in northwest corner of crossroads, 400 feet west of farmhouse; iron post stamped "Prim. Trav. Sta. No. 7. Elev. 7, 1918".....	37	09	05.15	76	36	33.47	3,525
Primary Traverse Station No. 8 (previously described).....	37	08	36.35	76	36	10.97	3,200

From Primary Traverse Station No. 5 via Shipyard Landing to Primary traverse Station No. 3.
(By J. C. Fales and J. J. Phelan in 1918.)

Prim. Trav. Sta. No. 5.....	37	09	11.84	76	34	30.42	.....
Shipyard Landing, east of junction of Warwick River and Stony Run, on top of knoll, in midst of grove of pine trees; iron post stamped "Prim. Trav. Sta. No. 24, 1918".....	37	08	36.56	76	33	52.71	4,695
Warwick Courthouse, about 1 mile north of, on east side of Newport News-Williamsburg road, opposite T road west to Shipyard Landing; iron post stamped "Prim. Trav. Sta. No. 25 P, 1918".....	37	08	57.42	76	33	11.16	3,967
Road forks.....	37	09	26.40	76	33	24.14	3,113
Warwick Courthouse, about 2.5 miles north of, on east side of Newport News-Williamsburg road, 100 feet north of T road east; iron post stamped "Prim. Trav. Sta. No. 29 P, 1918".....	37	09	54.33	76	33	22.91	2,826
Road forks on Reservoir dam.....	37	10	16.23	76	33	39.46	2,589
Prim. Trav. Sta. No. 3.....	37	10	37.08	76	34	11.71	3,361

From Grove triangulation station via highways to Primary Traverse Station No. 3 at old earthworks. (By J. J. Charters in 1918.)

Grove triangulation station (previously described).....	37	12	30.07	76	37	56.66	.....
James River, 50 feet east of east shore of, east side of road, 1 foot out of ground, granite block.....	37	11	52.81	76	37	24.38	4,586
James River, about 1,700 feet east of, at road forks; iron post stamped "Prim. Trav. Sta. No. 17, 1918 C".....	37	11	52.25	76	37	02.19	1,797
Crossroads.....	37	11	54.75	76	36	39.92	1,820
T road west.....	37	11	27.48	76	36	18.97	3,239
T road southwest.....	37	11	13.02	76	36	04.32	1,885
Skiffs Creek, on north bank of, 10 feet north of water line, 50 feet west of cedar tree and 50 feet south of oak tree with dead top; iron post stamped "Prim. Trav. Sta. No. 18, 1918 C".....	37	10	40.78	76	36	14.94	3,374
Old earthworks, Prim. Trav. Sta. No. 3.....	37	10	37.08	76	34	11.71	.....

From Primary Traverse Station No. 7 along highways to Primary Traverse Station No. 3.

Prim. Trav. Sta. No. 7 (previously described).....	37	13	02.90	76	37	22.39	.....
Morning Star Church, in triangular patch of grass, at T road south; iron post stamped "Prim. Trav. Sta. No. 14, 1918 C".....	37	12	23.48	76	36	19.11	6,486
T road south.....	37	11	56.61	76	35	58.25	3,199
Crossroads, on south side of road, near wire fence; iron post stamped "Prim. Trav. Sta. No. 16, 1918 C".....	37	11	47.12	76	35	34.74	2,129

YORKTOWN QUADRANGLE—Continued.

MULBERRY ISLAND.

Along highways. (By J. C. Fales in 1918.)

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Feet.</i>
T road, hub 2 by 4 inches with copper nail and washer (on line from Crawford to Prim. Trav. Sta. No. 3).....	37	08	25.06	76	36	15.23	.....
Road T, 700 feet south of "Collosial" Baptist Church; iron post stamped "Elev. 4. Prim. Trav. Sta. No. 10, 1918".....	37	08	06.99	76	36	07.63	1,929
Road fork south, opposite and on north side of fork, hub with 10-penny nail.....	37	07	52.74	76	36	17.52	1,648
Road fork in gore of fork; iron post stamped "Elev. 8. Prim. Trav. Sta. No. 15, 1918".....	37	07	32.32	76	36	20.01	2,075
T road west, east edge of road at.....	37	07	22.38	76	36	07.31	1,438
Footbridge crossing creek, south end of.....	37	07	05.11	76	36	10.69	1,763
On south side of road; iron post stamped "Prim. Trav. Sta. No. 17, 1918. Elev. 9".....	37	07	08.00	76	36	26.15	1,285
Bridge 12 by 12 feet, without railing (the western one of two bridges on parallel roads 20 feet apart), south end of.....	37	07	33.78	76	36	42.33	2,918
Right angle in cornfield road, near clump of trees in open field; iron post stamped "Elev. 8. Prim. Trav. Sta. No. 16, 1918".....	37	07	26.15	76	36	54.56	1,255
Crawford triangulation station (U. S. C. & G. S.).....	37	07	43.89	76	37	12.42	2,304
Closure error.....			.00			+ .04	.....
Prim. Trav. Sta. No. 10 (previously described).....	37	08	06.99	76	36	07.63	.....
T farm road west.....	37	07	52.98	76	35	56.41	1,684
T road to large farm house 800 feet east, on west side of road; iron post stamped "Elev. 10. Prim. Trav. Sta. No. 12, 1918".....	37	07	40.93	76	35	40.55	1,772
Mulberry Island post office, northeast corner of road T at; iron post stamped "Elev. 7. Prim. Trav. Sta. No. 14, 1918".....	37	07	21.91	76	35	17.20	2,698
Brick yard, 200 feet northwest of northwest corner of; iron post stamped "Elev. 10. Prim. Trav. Sta. No. 13, 1918".....	37	07	28.26	76	34	51.58	2,205
"Cut-out" toward Warwick River, northeast corner of, hub with copper nail witnessed by 2 blazed 8-inch yellow-pine trees, respectively 35 feet due south and 30 feet due west.....	37	07	51.66	76	34	55.90	2,292
Old earthworks, northwest corner of excavated ditch around.....	37	07	55.13	76	35	12.36	1,377
T road; iron post stamped "Elev. 12. Prim. Trav. Sta. No. 9, 1918".....	37	08	12.05	76	35	24.56	1,974
Road fork (two woods roads).....	37	08	15.99	76	35	40.75	1,369
White farm house 60 feet east of road, wooden wagon gate at entrance, road opposite and 15 feet west of.....	37	08	28.80	76	35	40.07	1,297
T of woods roads.....	37	08	38.73	76	35	43.17	1,034
Prim. Trav. Sta. No. 6 (previously described).....	37	08	58.09	76	35	58.58	2,330
Closure error.....			+ .04			- .10	.....
Mulberry Island post office, Prim. Trav. Sta. No. 14 (previously described).....	37	07	21.91	76	35	17.20	.....
Mulberry Island post office, 1.94 miles southeast of, in west end of grass triangle formed by roads in three directions; iron post stamped "Prim. Trav. Sta. No. 18, 1918. Elev. 6".....	37	06	58.74	76	35	08.44	2,446
45° angle to west in road, on outside of curve, hub with copper nail.....	37	06	47.05	76	35	34.25	2,400
Metal wagon gate at east entrance to white farm buildings, 40 feet west of; iron post stamped "Elev. 6. Prim. Trav. Sta. No. 19, 1918".....	37	06	51.72	76	35	54.38	1,698
Footbridge crossing creek (previously listed).....	37	07	05.11	76	36	10.69	1,893
Prim. Trav. Sta. No. 18 (previously listed).....	37	06	58.74	76	35	08.44	.....
Road fork east.....	37	06	55.85	76	35	07.61	300
Road fork east.....	37	06	51.41	76	35	07.30	449
T road west at old store, hub at east edge of road.....	37	06	48.54	76	35	07.25	290
Small white house with green trimmings, 200 feet south of, on west edge of road, hub with copper nail.....	37	06	37.15	76	35	00.64	1,270
Mulberry Island post office, 2.58 miles southeast of, 20 feet north of road, 30 feet east of lane, inside of wire fence; iron post stamped "Prim. Trav. Sta. No. 21, 1918. Elev. 9".....	37	06	22.29	76	34	43.19	2,064
Hub with copper nail, 12 feet north of woven-wire fence, 165 feet east of wooden gate in rail fence.....	37	06	30.52	76	34	25.46	1,660
Unpainted house on bank of Warwick River, 200 feet east of; iron post stamped "Elev. 9. Prim. Trav. Sta. No. 22, 1918".....	37	06	40.87	76	34	09.66	1,654
Log culvert over drainage ditch, at entrance to Jesse Nettle's farm, hub 20 feet east of.....	37	07	08.54	76	34	35.26	3,484
Prim. Trav. Sta. No. 18 (described above).....	37	06	58.74	76	35	08.44	2,843
Prim. Trav. Sta. No. 21 (described above).....	37	06	22.29	76	34	43.19	.....
Mulberry Island post office, 3.14 miles southeast of, at forks of lane, 60 feet north of road, 40 feet east of lane, 10 feet south of wire fence; iron post stamped "Prim. Trav. Sta. No. 23, 1918. Elev. 8".....	37	05	59.81	76	34	16.40	3,143
Road T, hub at southwest corner of.....	37	06	00.57	76	34	07.94	690
Angle in road near Campbell farm, hub about 75 feet north of.....	37	05	45.73	76	33	43.20	2,504
Mulberry Island post office, 3.76 miles southeast of, on south edge of road, near end of island, 3 feet south of gatepost, 2 feet west of wire fence; iron post stamped "Prim. Trav. Sta. No. 25, 1918. Elev. 7".....	37	05	33.70	76	33	55.12	1,553
Prim. Trav. Sta. No. 23 (described above).....	37	05	59.81	76	34	16.40	3,153
T road west (previously listed).....	37	06	48.54	76	35	07.25	.....

YORKTOWN QUADRANGLE—Continued.

MULBERRY ISLAND—Continued.

Along highways—Continued.

Station.	Latitude.	Longitude.	Distance between stations.
Hub with copper nail, 6 feet north of barbed wire fence, 150 feet east of fence corner, at northwest corner of plowed field.....	37 06 30.99	76 35 12.50	<i>Feet.</i> 1,824
South end of pine grove; iron post stamped "Elev. 4. Prim. Trav. Sta. No. 20, 1918".....	37 06 12.26	76 35 01.12	2,105
Hub 200 feet south of white house with green trimmings (previously listed).....	37 06 37.15	76 35 00.64	2,518
Hub near northwest corner of plowed field (described above).....	37 06 30.99	76 35 12.50	-----
Unpainted fishermen's huts, 100 feet north of; iron post stamped "Prim. Trav. Sta. No. 19, 1918".....	37 06 22.88	76 35 44.21	2,697
Hub 12 feet north of woven-wire fence (previously listed).....	37 06 30.52	76 34 25.46	-----
Red brick house on "Water View farm," at wagon gate in picket fence at entrance to; iron post stamped "Elev. 11. Prim. Trav. Sta. No. 24, 1918".....	37 06 14.30	76 33 51.96	3,171
Hub at southwest corner of road T (previously listed).....	37 06 00.57	76 34 07.94	1,900
Prim. Trav. Sta. No. 25 (previously listed).....	37 05 33.70	76 33 55.12	-----
T road west.....	37 05 21.41	76 33 37.89	1,869
Road T, 900 feet northwest of two-story white building; iron post stamped "Elev. 8. Prim. Trav. Sta. No. 26, 1918".....	37 05 13.99	76 33 28.44	1,072
Unpainted shacks at south end of island, near gate at entrance to; iron post stamped "Elev. 7. Prim. Trav. Sta. No. 27, 1918".....	37 04 52.42	76 33 08.08	2,736
Prim. Trav. Sta. No. 25 (described above).....	37 05 33.70	76 33 55.12	5,654

Along highways. (By J. J. Phelan in 1918.)

Prim. Trav. Sta. No. 25.....	37 08 57.42	76 33 11.16	-----
T road west.....	37 08 36.53	76 32 53.21	2,566
Warwick courthouse, in front wall of, 3 feet from ground; aluminum tablet stamped "Prim. Trav. Sta. No. 26 P, 1918. Elev. 36".....	37 07 47.21	76 32 32.76	5,257
George N. Sykes's residence, in northeast corner of yard of, on south side of T road and on west side of main Newport News-Williamsburg road from Denbigh post office to Mennonite colony; iron post stamped "Prim. Trav. Sta. No. 27 P, 1918".....	37 07 38.54	76 32 22.00	1,237
Crossroads, center of, nail in hub.....	37 07 30.88	76 32 44.57	1,537
T road north.....	37 07 29.50	76 33 14.78	2,450
T road south, 18 feet northwest from mail box marked "P. W. O."; nail in hub.....	37 07 28.35	76 33 27.60	1,050
Road forks, in center of; nail in hub.....	37 07 29.82	76 33 48.60	1,700
Hoops machine shop, 30 feet west of, 2.5 feet east of gatepost, on north side of road; nail in hub.....	37 07 26.01	76 34 06.10	1,440
Center of road, 8 feet northwest from farm road; nail in hub.....	37 07 43.27	76 33 52.60	2,060
Henry Schelley's residence, in corner of field, 5 feet west of center of road where wood road leaves farm road; iron post stamped "Prim. Trav. Sta. No. 23 P, 1918".....	37 08 04.78	76 34 22.32	3,245
Hub in ground 17 feet north of tree marked "P. T. 17 feet," and 19 feet east of tree marked "P. T. 19 feet".....	37 08 11.50	76 34 14.51	930
Hub with nail 6.4 feet south of large oak tree marked "P. T. 6.4".....	37 08 29.28	76 33 51.71	2,577
Prim. Trav. Sta. No. 24.....	37 08 36.56	76 33 52.71	750

Spur line along highways.

Jesse Nettler's residence, 70.9 feet southwest from chimney of, 46.2 feet south from nail in 5-inch walnut tree, and 28.6 feet north from nail in 6-inch pine tree; iron post stamped "Prim. Trav. Sta. No. 22 P, 1918".....	37 07 02.21	76 33 36.76	-----
Mohe's, about 0.75 mile northeast of, northwest corner of crossroads, in field about 3 feet from fence line; iron post stamped "Prim. Trav. Sta. No. 21 P, 1918".....	37 06 36.82	76 32 45.88	7,077
Menchville, about 0.75 mile northwest of, in field at northeast corner of junction of Cedar road and Youngs road; iron post stamped "Prim. Trav. Sta. No. 20 P, 1918".....	37 05 34.98	76 32 04.98	3,037

Southeast along highways near north border of quadrangle. (By J. J. Charters in 1918.)

Prim. Trav. Sta. No. 7 (previously located).....	37 13 02.90	76 37 22.39	-----
Near T road bearing west, on root of white oak tree near mail box (Lincoln Orange) U. S. temporary bench mark.....	37 12 48.42	76 37 10.06	1,770
U. S. temporary bench mark marked "76.6".....	37 12 31.79	76 36 48.53	2,421
Near T road south, on south side of road, near mail box of C. C. Cole, U. S. bench mark marked "63.3 Elev".....	37 12 25.09	76 36 35.49	1,253

YORKTOWN QUADRANGLE—Continued.

Southeast along highways near north border of quadrangle—Continued.

Station.	Latitude.			Longitude.			Distance between stations.
	°	'	"	°	'	"	<i>Fect.</i>
Near Morning Star Church, in triangular patch of grass at intersection of two roads; iron post stamped "Prim. Trav. Sta. No. 14, 1918 C. Elev. 53.8".....	37	12	23.47	76	36	19.10	1,336
T road bearing north and south, intersection of center line south. At crossroads north and south and east and west, on south side of road, near wire fence; iron post stamped "Prim. Trav. Sta. No. 16, 1918 C".....	37	11	56.60	76	35	58.25	3,198
Skiff's Creek, station 296, first point on north side.....	37	11	47.12	76	35	34.75	2,129
Skiff's Creek, station 297, second point on north side.....	37	11	01.00	76	35	04.90	5,253
Skiff's Creek, station 298, on south shore.....	37	10	59.37	76	35	07.40	260
Tie point, station 303, on line from Grove triangulation station. Angle in road, 110 feet south of junction of T road northeast, on east side of road, 1 by 2 inch wooden stake.....	37	10	54.38	76	34	59.07	842
Forks of Y road to Newport News and Williamsburg and Mulberry Island road; iron post stamped "Prim. Trav. Sta. No. 30 P, 1918".....	37	10	36.21	76	34	58.41	1,838
	37	10	35.92	76	34	46.47	970
	37	10	37.08	76	34	11.71	2,819

East along highways near north border of quadrangle. (By J. J. Charters in 1918.)

On Yorktown road near Charles Corner; U. S. permanent bench mark No. 10 (previously computed).....	37	14	48.64	76	37	08.55	.....
Halsteads Point, 2.5 miles northwest of, top of north end head wall of concrete culvert over small creek; chiseled square marked "U. S. B. M. 39.2".....	37	14	40.14	76	36	39.17	2,526
Halsteads Point, 2.25 miles northwest of, 0.25 mile east of small creek, 350 feet west of dim road crossing highway, 4 feet from telephone pole 2593, at break of hill, top of 4-inch pine stake; copper nail and washer, marked "U. S. B. M. 87.4".....	37	14	32.67	76	36	26.67	1,262
T road east, intersection of center line south.....	37	14	31.88	76	36	19.56	580
Halsteads Point, 1.8 miles northwest of, on north side of Williamsburg-Yorktown road, on east side of T road north; iron post stamped "Prim. Trav. Sta. 12 P, 85 1918," corner fence post marked "U. S. P. B. M. 85.1".....	37	14	24.65	76	36	01.10	1,662
Halsteads Point, 1.5 miles northwest of, top of south end of stone pipe culvert, telephone pole 20 feet west marked "U. S. 82.4".....	37	14	12.37	76	35	50.90	1,491
T road west, intersection of center line south.....	37	14	08.78	76	35	47.48	455
Halsteads Point, 1.2 miles northwest of, on summit of low ridge, on south side of road, opposite T road north, in root of 40-inch oak tree; copper nail and washer, tree marked "U. S. B. M. 82.9".....	37	14	01.94	76	35	34.10	1,284
Halsteads Point, 0.9 mile northwest of, on south side of road, at T road north, in root of 15-inch pine tree; 40-penny wire nail, tree marked "U. S. 77.3".....	37	13	54.10	76	35	19.80	1,397
U. S. temporary bench mark marked "82.0," 13 feet west of center of road.....	37	13	48.76	76	35	05.04	1,309
Temporary bench mark 14.1 feet east of road.....	37	13	48.22	76	34	53.65	922
T road west, intersection in center of road south.....	37	13	49.17	76	34	43.20	849
Halsteads Point, 0.25 mile west of, at T road north, at telephone pole 2679, top of 3-inch stake; wire nail, pole marked "U. S. 83.1".....	37	13	49.45	76	34	39.16	328
Halsteads Point, at intersection of three roads; Yorktown, Williamsburg, and Newport News, near Goodrich guidepost, in triangular grass plat; iron post stamped "Prim. Trav. Sta. No. 13, 1918 C Elev. 87".....	37	13	43.63	76	34	24.13	1,350

Magnetic declination for north border of quadrangle, 5.4° W.

West along highways near north border of quadrangle. (By J. J. Phelan in 1918.)

Yorktown monument, U. S. Coast & Geodetic Survey triangulation station, center of shaft.....	37	14	00.23	76	30	18.84	.....
Yorktown, in front wall of old customhouse, 22 feet southwest of road crossing, U. S. G. S. bench mark.....	37	14	05.24	76	30	28.62	939
Yorktown, road crossing, hub in center of road, 100 feet northwest of courthouse, 25 feet north of Yorktown road.....	37	14	09.27	76	30	33.86	587
Road, 29 feet south of edge of, 30 feet southeast from edge of bridge; nail in hub.....	37	14	20.67	76	30	48.37	1,645
Yorktown, 1.6 miles west of, at crossroads, at fork of Dabney road, 80 feet north-northwest of pine tree marked with white paint; iron post stamped "Prim. Trav. Sta. No. 33 P, 1918. Elev. 69".....	37	13	58.01	76	31	57.03	6,006
Road forks.....	37	14	02.61	76	32	25.96	2,386
Yorktown, 2.35 miles west of, in southwest corner of T lane south through woods; iron pipe 2 inches in diameter with cap on top painted white; top of cap marked "U. S. 75.5 B. M.".....	37	13	58.83	76	32	43.90	1,500

YORKTOWN QUADRANGLE—Continued.

West along highways near north border of quadrangle—Continued.

Station.	Latitude.	Longitude.	Distance between stations.
Yorktown, 2.51 miles west of, 70 feet east of front entrance of Rising Sun Church, in northeast corner at T road north, in south root of 5-foot jack-oak tree; copper nail and washer, painted "U. S. 76.9 B. M."	37 13 56.17	76 32 53.48	Feet. 819
T road, 50 feet southwest of, U. S. 85.5 B. M., on pine tree on east side of road	37 13 49.88	76 34 07.90	6,052
Prim. Trav. Sta. No. 13 C, Halsteads Point (described above)	37 13 43.63	76 34 24.13	1,456

Magnetic declination for north border of quadrangle, 5.6° W.

East along highways near center of quadrangle. (By J. J. Charters in 1918.)

Prim. Trav. Sta. No. 14 (previously described)	37 12 23.47	76 36 19.10	.....
Lebanon Church, 1.6 miles southwest of, in southwest angle of crossroads, at north end of a grove of black-locust trees, at entrance to old farmhouse, top of 2 by 4 inch stake; copper nail and washer, tree 50 feet southwest marked "U. S. B. M. 46.1"	37 12 25.58	76 36 36.16	320
T road north, intersection of roads	37 12 27.36	76 35 57.30	1,537
Lebanon Church, 1.4 miles southwest of, 800 feet west of Blows Mill Run, at break of hill, on south side of road, 1 foot from fence post, top of 3-inch stake; copper nail and washer, post marked "U. S. 52.0"	37 12 28.72	76 35 51.76	470
Lebanon Church, 1.0 mile southwest of, 40 feet south of Chesapeake & Ohio Ry. track, on east side of road, top of 7-inch oak stake; copper nail and washer, telegraph pole 10 feet south marked "U. S. B. M. 49.3"	37 12 32.07	76 35 17.08	2,826
Lebanon Church, 0.5 mile west of, on north side of road, at T road north, top of 14-inch pine stump; copper nail and washer, tree 40 feet west marked "U. S. B. M. 84.3"	37 12 47.41	76 34 46.38	2,929
T road northeast, intersection of center lines south	37 12 47.01	76 34 32.50	1,124
Lebanon Church, in southeast corner of lot, northwest corner at junction of first-class T road bearing west, about 20 feet from sign of Warwick Hotel; iron post stamped "Prim. Trav. Sta. No. 15 C, 1918"	37 12 45.78	76 34 19.44	1,064

South along highways near center of quadrangle. (By J. J. Phelan in 1918.)

Halsteads Point, Prim. Trav. Sta. No. 13 C, 1918 (previously described)	37 13 43.63	76 34 24.13	.....
Road fork, 33 feet from telephone pole 2736, 6 feet east of road bank, 20 feet southwest from stump on road bank, marked "U. S. B. M."	37 12 55.41	76 34 15.57	4,926
Lebanon Church, Prim. Trav. Sta. No. 15 C, 1918 (described above)	37 12 45.78	76 34 19.44	1,023
T farm road	37 12 01.37	76 34 24.34	4,509
Water tank, 150 feet southeast of, at T road in Lee Hall road going to depot, in southeast corner of lot; iron post stamped "Prim. Trav. Sta. No. 31 P, 1918"	37 11 40.30	76 34 18.86	2,177
Hub with nail, 44 feet from telephone pole 2804 AA, 21.9 feet from gatepost east of road, 24.6 feet from cedar tree on west side of road, 30.7 feet from cedar tree on east side of road, 15 feet from barbed-wire fence	37 11 37.37	76 34 18.31	300
Hub in center of tracks	37 11 32.46	76 34 18.42	498
Telephone pole 2809, 20 feet from, 100 feet from railroad crossing, near ordinance material storeroom and truck park	37 11 31.45	76 34 18.46	102
Crossroads, 50 feet south of T. H. Fleming's store door, 25 feet east of sweet-gum tree, 35 feet from telephone pole 2828; hub with nail	37 11 07.45	76 34 19.83	2,429
Prim. Trav. Sta. No. 30 P, 1918 (previously described)	37 10 37.08	76 34 11.71	3,142

Magnetic declination for center of quadrangle, 5° 26' W.

Along highways. (By J. J. Charters in 1918.)

Prim. Trav. Sta. No. 16 (previously described)	37 11 47.12	76 35 34.75	.....
Station 286, 14.22 feet from 2-inch iron pipe (landmark), 2 by 4 inch wooden hub	37 11 30.94	76 35 28.62	1,710
In southeast corner of clearing, about 250 feet east of brown painted house of F. C. Lee, about 15 feet west of wooden gate; wooden stake with nail in top	37 11 12.50	76 35 19.27	2,013
Station 296, north side of Skiffs Creek	37 11 01.00	76 35 04.90	1,645

YORKTOWN QUADRANGLE—Continued.

Near Skiffs Creek.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Prim. Trav. Sta. No. 18, on north side of Skiffs Creek (previously described).....	37 10 40.78	76 36 14.94	-----
Station 421, on south shore of Skiffs Creek; stake in ground with nail in top.....	37 10 37.99	76 35 56.23	1,540
Station 431, 5 feet east of white witness flag; stake in ground with nail in top.....	37 10 33.13	76 35 36.11	1,702
Station 437, 4 feet north of center of road, 220 feet southeast of sawdust pile; stake.....	37 10 37.12	76 35 17.62	1,550
Station 303 (tie point).....	37 10 36.21	76 34 58.41	1,558
Railroad azimuth (Chesapeake & Ohio), by J. J. Phelan, at Oriana (observed), 147° 47' 57"; at Lee Hall, 147° 49' 00". One mile south of Williamsburg, by J. J. Charters, at Prim. Trav. Sta. No. 1, 134° 34' 35"; at Grovestation, 105° 00' 48" (?); 50 feet from line post of York and James counties, 134° 15' 50".			

From Lee Hall east and north along highways. (By J. J. Phelan in 1918.)

Hub with nail, 44.1 feet from telephone pole 2804 AA (previously described).....	37 11 37.37	76 34 18.31	-----
T road left (north).....	37 11 35.00	76 33 57.20	1,729
Lee Hall, 1.3 miles east of, on north side of road, opposite road south, 15 feet north of pine tree painted "U. S. 40.6 B. M."; iron post stamped "Prim. Trav. Sta. No. 35 P, 1918".....	37 11 34.48	76 33 27.60	2,395
T road left (north), hub with nail about 4 inches high from ground.....	37 11 20.81	76 33 03.76	2,373
Nail in root of blazed tree, 8 feet east of tree.....	37 11 30.38	76 32 38.29	2,277
Lee Hall, 2.64 miles east of, about 500 feet east of small swampy drain south, in center of fork of woods road, in south root of pine tree 1.6 feet in diameter; iron nail and copper washer, painted "U. S. 38.9 B. M.".....	37 11 34.38	76 32 12.89	2,095
Center of road, 7 feet from large pine tree marked "44.0"; nail in hub.....	37 11 34.94	76 32 03.43	767
Center of road, 4 feet southeast of pine tree marked "35.2"; nail in hub.....	37 11 36.68	76 31 54.37	753
Hub near foot of upturned pine tree.....	37 11 40.43	76 31 48.24	624
T road south.....	37 11 41.48	76 31 42.26	495
Intersection of T roads, hub with nail.....	37 11 43.58	76 31 37.83	416
Lee Hall, 3.3 miles east of, about 300 feet west of wooden bridge over Great Run, on north side of road forks, blazed pine tree 1.5 feet in diameter, in south root of; iron nail and copper washer, painted "U. S. 41.4 B. M.".....	37 11 43.74	76 31 32.77	409
Intersection of T road, 30 feet from, "41.8" painted in white on pine tree; hub with nail.....	37 11 48.65	76 31 39.43	733
Lee Hall, 2.1 miles northeast of, 0.1 mile south of York and Warwick county line, directly opposite T road northeast, on south side of road; iron post stamped "Prim. Trav. Sta. No. 34 P, 1918. Elev. 52".....	37 12 08.22	76 32 10.46	3,197
Lee Hall, 2.5 miles northeast of, in northeast corner of T road north, in north root of walnut tree 2.3 feet in diameter; iron nail and copper washer, painted "U. S. 50.8 B. M.".....	37 12 25.25	76 31 58.34	1,981
Center of T road, 50 feet north of gatepost with heavy chains; hub with nail.....	37 12 48.06	76 31 47.30	2,473
Bridge, point 6 feet upstream.....	37 12 50.10	76 31 45.62	247
Opposite T road east.....	37 13 06.95	76 31 46.40	1,705
T road west, on east side of road, hub with nail.....	37 13 13.88	76 31 42.35	774
Yorktown, 1.4 miles southwest of, about 400 feet west of road forks, on west side of road 200 feet west of white frame house, in north root of pine tree 1.8 feet in diameter; iron nail and copper washer, painted "U. S. 67.2 B. M.".....	37 13 17.58	76 31 39.24	450
T road west, 10 feet south of pine tree marked "61".....	37 13 20.28	76 31 40.37	288
Intersection of T road east, nail in hub.....	37 13 19.29	76 31 53.54	1,070
Five feet west of 15-inch pine tree, hub with nail.....	37 13 25.02	76 32 05.57	1,134
Yorktown, 1.7 miles southwest of, 0.15 mile east of N. Dabney's farm residence, 50 feet east of road forks, on north side of road, in south root of pine tree 1.4 feet in diameter; iron spike, painted "U. S. 67.4 B. M.".....	37 13 25.19	76 32 11.00	440
Ten feet east of 20-inch pine tree, hub with nail.....	37 13 29.25	76 32 12.38	426
Fifteen feet from pine tree with faded trespass sign, hub with nail.....	37 13 30.91	76 32 13.47	190
Yorktown, 1.7 miles southwest of, on west side of road, 25 feet north of gateway through lane leading to M. Dabney's farm residence; iron post stamped "Prim. Trav. Sta. No. 32 P, 1918. Elev. 69".....	37 13 30.75	76 32 19.36	477
T road.....	37 13 39.50	76 32 11.47	1,090
Prim. Trav. Sta. No. 33 P (previously located).....	37 13 58.01	76 31 57.03	2,206

Magnetic declination along north border of quadrangle, 5° 28' W.

YORKTOWN QUADRANGLE—Continued.

Near Grove triangulation station. (By J. J. Charters in 1918.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Grove triangulation station (previously described).....	37 12 30.07	76 37 56.66	.....
4 by 4 inch wooden hub, on top of bank, at end of ravine leading from James River.....	37 12 26.63	76 37 50.05	644
Temporary bench mark in root of big pine tree.....	37 12 18.94	76 37 29.89	, 810
Temporary bench mark, near road to southwest, at edge of woods, on stump. Elevation 35.5.....	37 12 09.92	76 37 27.52	936
James River, 50 feet east of east shore of, east side of road, 1 foot out of ground; granite block.....	37 11 52.81	76 37 24.38	1, 748

South and west along highways. (By J. J. Phelan in 1918.)

Lee Hall, 3.3 miles east of, "U. S. 41.4 B. M.," (previously described).....	37 11 43.74	76 31 32.77	.....
Center of bridge over Great Run.....	37 11 43.86	76 31 28.44	352
T road intersection; hub with nail.....	37 11 48.36	76 31 18.25	942
T road to left.....	37 11 50.22	76 31 09.68	719
50 feet east of road fork, 10 feet west of pine tree; hub.....	37 11 08.37	76 31 04.51	4, 255
35 feet southeast from gatepost with faded hunting sign, 35 feet north-northeast of large oak tree, 5 feet from edge of ditch.....	37 11 03.37	76 30 57.00	792
South side of T road intersection; hub.....	37 11 00.01	76 31 06.96	874
60 feet north of road fork.....	37 10 49.93	76 31 08.59	1, 027
T road.....	37 10 42.58	76 31 12.50	808
25 feet south of gate and wire fence, in southeast corner of T road, 2 miles east of bridge over reservoir; iron post stamped "Prim. Trav. Sta. No. 36 P, 1918".....	37 10 37.81	76 31 51.17	3, 165
40 feet north and west of base of engine, 35 feet southeast by east from tree, 2.5 feet west from water; hub with nail.....	37 10 33.57	76 31 57.38	430
T road left.....	37 10 25.83	76 31 52.86	793
T road.....	37 10 17.50	76 32 20.25	2, 370
Lee Hall, 2.4 miles southeast of, in northwest corner of crossroads, in east root of sweet-gum tree 8 inches in diameter; iron nail and copper washer, painted "U. S. 40.2 B. M.".....	37 10 15.95	76 32 22.57	244
T road to right.....	37 10 14.02	76 32 25.83	328
T road, 15 feet south of mail box, 21 feet northeast of pine tree marked "U. S. 41.8 B. M.".....	37 10 01.83	76 32 29.81	1, 275
T road to right, hub with nail.....	37 09 59.02	76 32 41.10	955
2.45 feet north of south rail, on north track of Chesapeake & Ohio Ry., 25 feet west of railroad-crossing sign, 20 feet east of cattle guard, in center of track; nail.....	37 09 54.60	76 33 01.52	1, 171
Prim. Trav. Sta. No. 29 (previously located).....	37 09 54.33	76 33 22.91	1, 731
Water-tank tower of Newport News Water Supply Reservoir, at Reservoir station on Chesapeake & Ohio Ry.....	37 10 06.08	76 33 14.34	1, 376

East along highways to Oriana. (Unchecked spur line.)

Prim. Trav. Sta. No. 27 P, 1918 (previously located).....	37 07 38.54	76 32 22.00	.....
Oriana station, 500 feet north of, in center of railroad track, in westbound track, 25 feet southeast of railroad-crossing sign-board; spike.....	37 08 05.72	76 31 35.95	4, 633
Nail in tie, in center of westbound track, about 800 feet north-westerly from previous position.....	37 08 12.41	76 31 41.21	800

Magnetic declination in northeast corner of quadrangle, 5° 33' W.

121166°—23—Bull. 709—33

TRIANGULATION STATIONS.

Yorktown quadrangle.

WARWICK COUNTY.

CAMP ABRAHAM EUSTIS.

The following geographic positions on North American datum were determined by primary traverse and are based upon Coast and Geodetic Survey triangulation station Crawford and U. S. Geological Survey primary traverse stations determined in 1918.

Azimuths and distances were obtained from inverse computations from previously determined latitudes and longitudes.

The work was done by F. J. McMaugh in 1919.

TOWER NO. 1, WARWICK COUNTY, VA.

Motor Transport School, 900 feet south of curve in road at; stake at center of site of steel observation tower 105 feet high.

[Latitude $37^{\circ} 09' 00.14''$. Longitude $76^{\circ} 35' 20.94''$.]

To station—	Azimuth.	Back azimuth.	Distance.
	° ' "	° ' "	<i>Log. meters.</i>
Tower No. 2.....	49 20 24	229 18 18	3.5549473
Tower No. 3.....	336 58 48	156 59 32	3.6640887
Tower No. 4.....	114 56 03	194 55 36	3.6305239
Tower No. 5.....	336 37 44	156 39 05	3.9226465
Tower No. 6.....	145 53 56	325 51 43	3.9854945

TOWER NO. 2, WARWICK COUNTY, VA.

Mulberry Point, 0.50 mile northeast of, 120 feet northeast of Coast and Geodetic Survey triangulation tablet in concrete post on shore rampart of old Fort Crawford; stake at center of site for steel observation tower.

[Latitude $37^{\circ} 07' 44.59''$. Longitude $76^{\circ} 37' 11.23''$.]

To station—	Azimuth.	Back azimuth.	Distance.
	° ' "	° ' "	<i>Log. meters.</i>
Tower No. 1.....	229 18 18	49 20 24	3.5549473
Tower No. 3.....	292 44 54	112 46 44	3.6910244
Tower No. 4.....	317 39 00	137 39 39	3.3817023
Tower No. 5.....	311 20 47	131 23 14	3.9058253
Tower No. 6.....	165 20 36	345 19 30	4.0287282

TOWER NO. 3, WARWICK COUNTY, VA.

Curtis Point, 1.90 miles northwest of, 0.60 mile east of main road on Mulberry Island, 200 feet east of site of farmhouse, on west bank of Warwick River; stake at center of site for steel observation tower.

[Latitude 37° 06' 42.97". Longitude 76° 34' 07.86".]

To station—	Azimuth.	Back azimuth.	Distance.
	° ' "	° ' "	<i>Log. meters.</i>
Tower No. 1.....	156 59 32	336 58 48	3.6640887
Tower No. 2.....	112 46 45	292 44 54	3.6910244
Tower No. 4.....	92 22 04	272 20 53	3.4635208
Tower No. 5.....	336 07 04	156 07 42	3.5729940
Tower No. 6.....	149 26 49	329 23 52	4.1526472

TOWER NO. 4, WARWICK COUNTY, VA.

Morrison Creek, 400 feet east of point at mouth of, 800 feet southwest of site of old farm buildings; stake at center of site for steel observation tower.

[Latitude 37° 06' 46.85". Longitude 76° 36' 05.52".]

To station—	Azimuth.	Back azimuth.	Distance.
	° ' "	° ' "	<i>Log. meters.</i>
Tower No. 1.....	194 55 36	14 56 03	3.6305239
Tower No. 2.....	137 39 39	317 39 00	3.3817023
Tower No. 3.....	92 22 04	272 20 53	3.4635208
Tower No. 5.....	308 40 53	128 42 41	3.7530488
Tower No. 6.....	160 21 48	340 20 03	4.1094106

TOWER NO. 5, WARWICK COUNTY, VA.

Curtis Point, near end of, 130 feet southeast of old gateway; stake at center of site for steel tower.

[Latitude 37° 04' 52.00". Longitude 76° 33' 06.54".]

To station—	Azimuth.	Back azimuth.	Distance.
	° ' "	° ' "	<i>Log. meters.</i>
Tower No. 1.....	156 39 05	336 37 44	3.9226465
Tower No. 2.....	131 23 14	311 20 47	3.9058253
Tower No. 3.....	156 07 42	336 07 04	3.5729940
Tower No. 4.....	128 42 41	308 40 53	3.7530488
Tower No. 6.....	150 50 47	330 47 13	4.2536414

TOWER NO. 6, WARWICK COUNTY, VA.

J. D. Dunn's house, about 500 feet southeast of, 0.25 mile south of main road, near ravine, 300 feet southeast of iron post stamped "Prim. Trav. Sta. No. 4"; stake at center of site for steel observation tower.

[Latitude 37° 13' 19.87". Longitude 76° 39' 00.88".]

To station—	Azimuth.	Back azimuth.	Distance.
	° ' "	° ' "	<i>Log. meters.</i>
Tower No. 1.....	325 51 43	145 53 56	3.9854945
Tower No. 2.....	345 19 30	165 20 36	4.0287282
Tower No. 3.....	329 23 52	149 26 49	4.1526472
Tower No. 4.....	340 20 03	160 21 48	4.1094106
Tower No. 5.....	330 47 13	150 50 47	4.2536414

