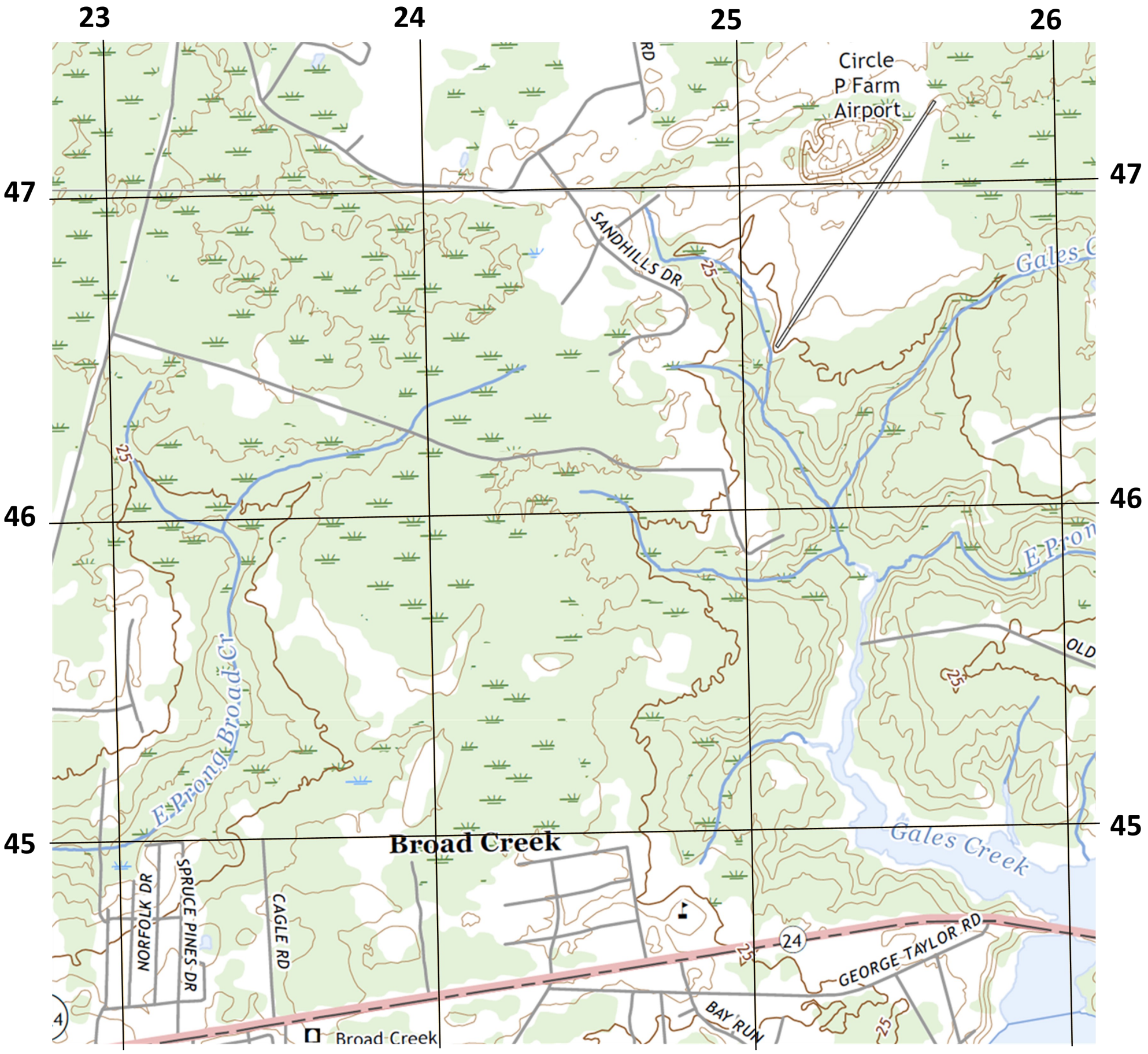
Camp Sam Hatcher Special



1 0.5 0 KILOMETERS 1 2

1000 500 0 METERS 1000 2000

1 0.5 0 1

MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

FEET

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

ROAD CLASSIFICATION

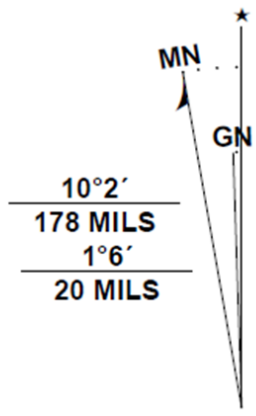
Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
State Route	
FS Primary Route	FS Passenger Route
FS High Clearance Route	

Check with local Forest Service unit
for current travel conditions and restrictions.

U.S. National Grid
100,000 - m Square ID

UD

Grid Zone Designation
18S

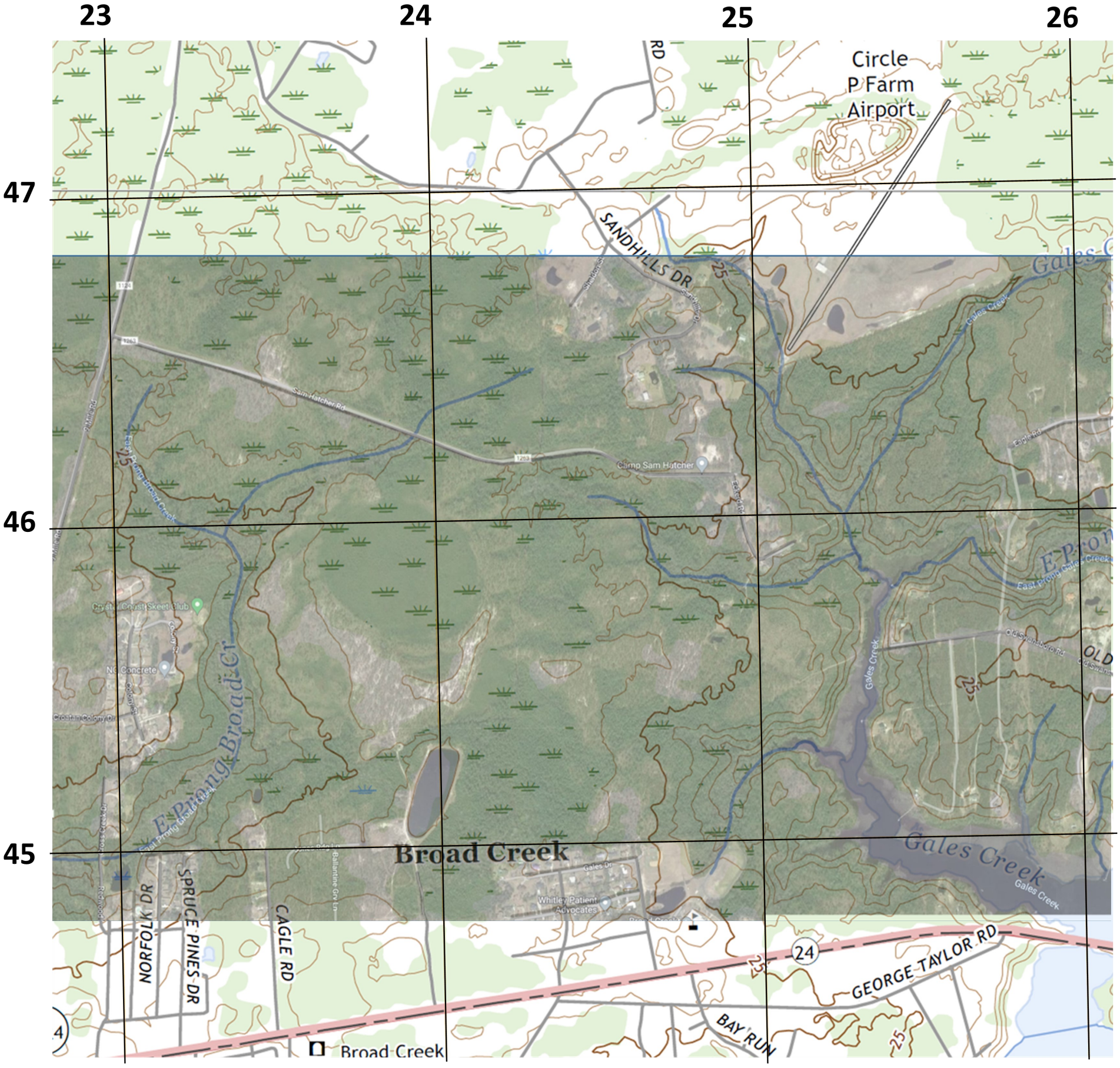


UTM GRID AND 2019 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

SALTER PATH, NC

2022

Camp Sam Hatcher Special



1 0.5 0 KILOMETERS 1 2

1000 500 0 METERS 1000 2000

1 0.5 0 1

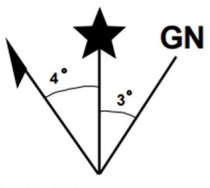
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

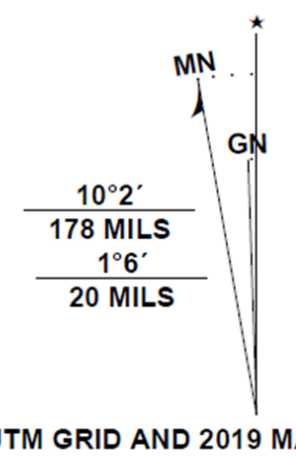
FEET

LARS stands for **Left Add, Right Subtract**, and is used when going from *the known azimuth* to the *unknown azimuth*, irrespective of grid or magnetic azimuth. Once one has created a declination diagram and found the GM angle, LARS users are concerned only with the direction (right or left) from the known angle (azimuth) to the unknown angle, for the cardinal direction (east or west) is no longer relevant. Once the appropriate direction is determined, the GM angle is then added or subtracted to the known azimuth.

In this example, the known azimuth is 270 magnetic. Using LARS, convert to a grid azimuth.



1. GM Angle= 7W
2. Known= 270 **mag**
3. Going from the known (line representi the unknown (line representing grid az RIGHT. Now subtract the GM angle o grid azimuth of 263 deg.

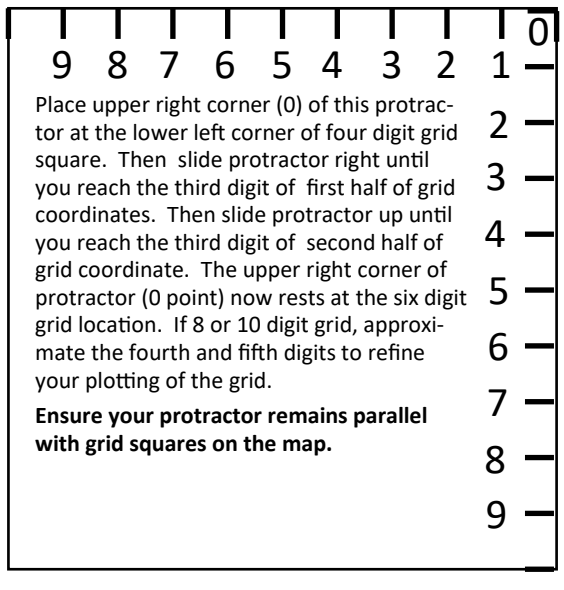


UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

U.S. National Grid
100,000 - m Square ID
UD
Grid Zone Designation 18S

Cut me out to use as a protractor for plotting MGRS points.



Place upper right corner (0) of this protractor at the lower left corner of four digit grid square. Then slide protractor right until you reach the third digit of first half of grid coordinates. Then slide protractor up until you reach the third digit of second half of grid coordinate. The upper right corner of protractor (0 point) now rests at the six digit grid location. If 8 or 10 digit grid, approximate the fourth and fifth digits to refine your plotting of the grid.

Ensure your protractor remains parallel with grid squares on the map.