NAME OF PROCEDURE: Military Grid Referencing System

Objective: To establish a clear understanding of the Military Grid Referencing System utilized by the 36th FS Cougars.

A. Military Grid Referencing System

1. Military Grid Reference System (MGRS) is the geocoordinate standard used by NATO militaries for locating points on Earth. The MGRS is derived from the Universal Transverse Mercator (UTM) grid system and the Universal Polar Stereographic (UPS) grid system but uses a different labeling convention.

B. Finding your eight-to-12-digit grid coordinate.

1. Without a Coordinate Scale. In order to determine grids without a coordinate scale, the reader simply refers to the north-south grid lines numbered at the bottom margin of any map.
2. Then he reads RIGHT to the north-south grid line that precedes the desired point (this first set of two digits is the RIGHT reading).
3. Then by referring to the east-west grid lines numbered at either side of the map, the map reader moves UP to the east-west grid line that precedes the desired point (these two digits are the UP reading).
4. Coordinates 1484 locate the 1,000-meter grid square in which point X is located; the next square to the right would be 1584; the next square up would be 1485, and so forth (Figure 1-1).
5. To locate the point to the nearest 100 meters, use estimation. By mentally dividing the grid square in tenths, estimate the distance from the grid line to the point in the same order (RIGHT and UP).
6. Give complete coordinate RIGHT, then complete coordinate UP. Point X is about two-tenths or 200 meters to the RIGHT into the grid square and about seven-tenths or 700 meters UP. The coordinates to the nearest 100 meters are 142847. Figure 1-1. Determining grids without coordinate point.