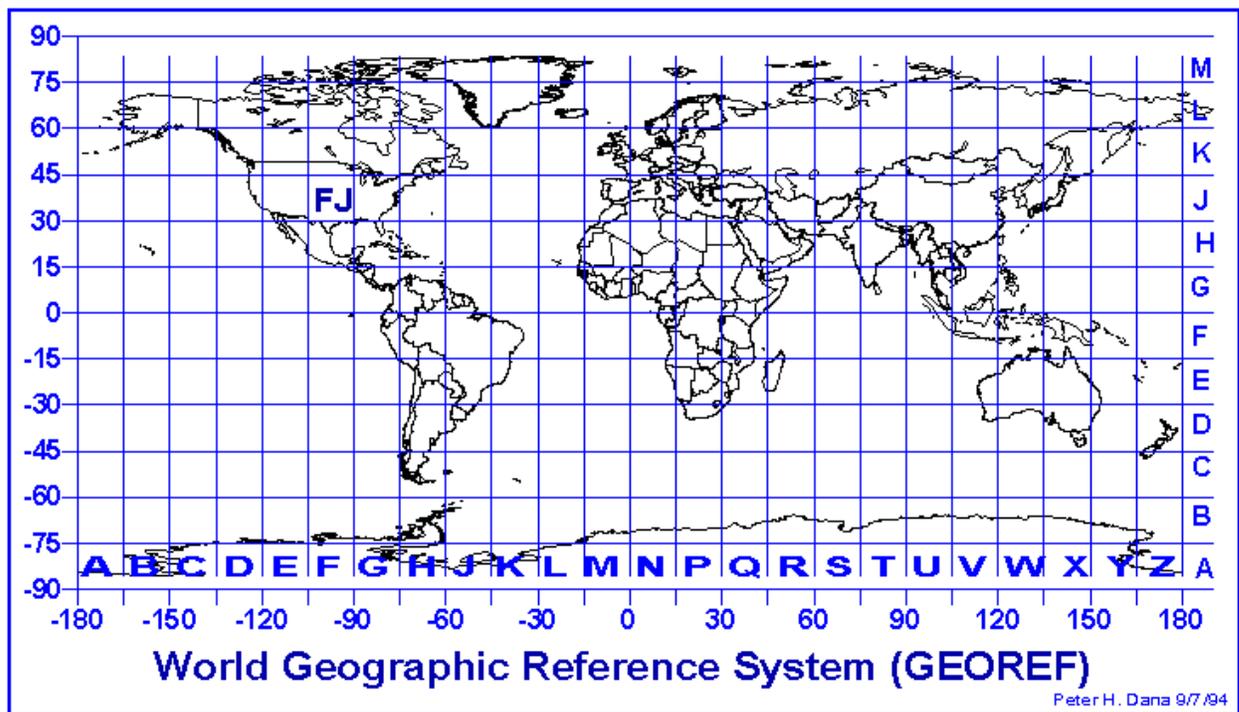


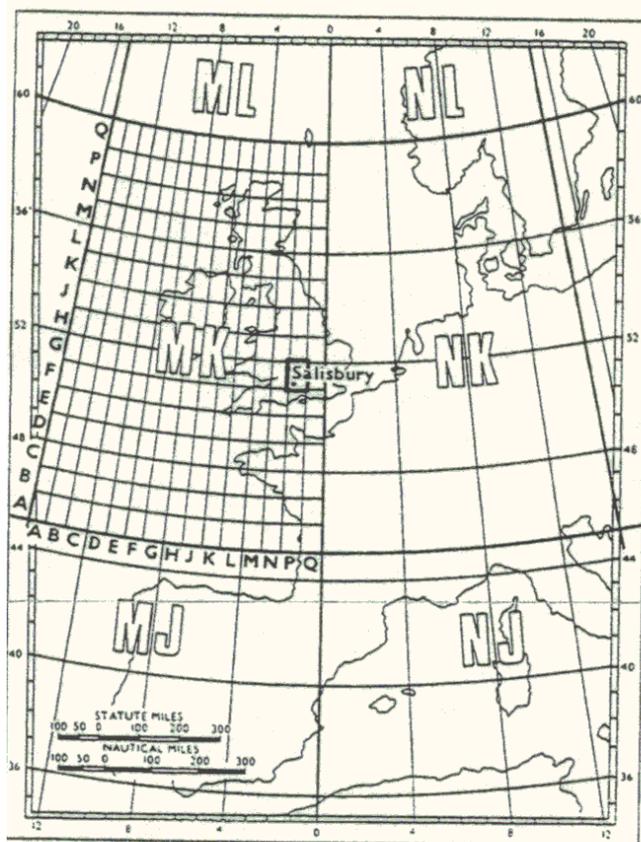
## World Geographic Reference System (GEOREF)

The World Geographic Reference System (GEOREF) is an area-designation method used for interservice reporting for air defense and strategic air operations. It provides a method of expressing position in a form suitable for reporting and plotting and may be applied to any map or chart graduated in latitude and longitude. GEOREF defines the unit geographic area in which a specific point lies. The Earth is divided into quadrangles of longitude and latitude with a systematic code that gives positive identification to each quadrangle. The point of origin is the 180° meridian. It extends eastward 360° back to the 180°. It extends northward 180° to the North Pole.

- In the World Geographic Reference System, there are 24 longitudinal zones of 15 degrees width lettered A to Z (omitting I and O). There are 12 bands of latitude of 15 degrees lettered A to M (omitting I). The first letter is that of the longitude and the second letter is the latitude band. See figure below



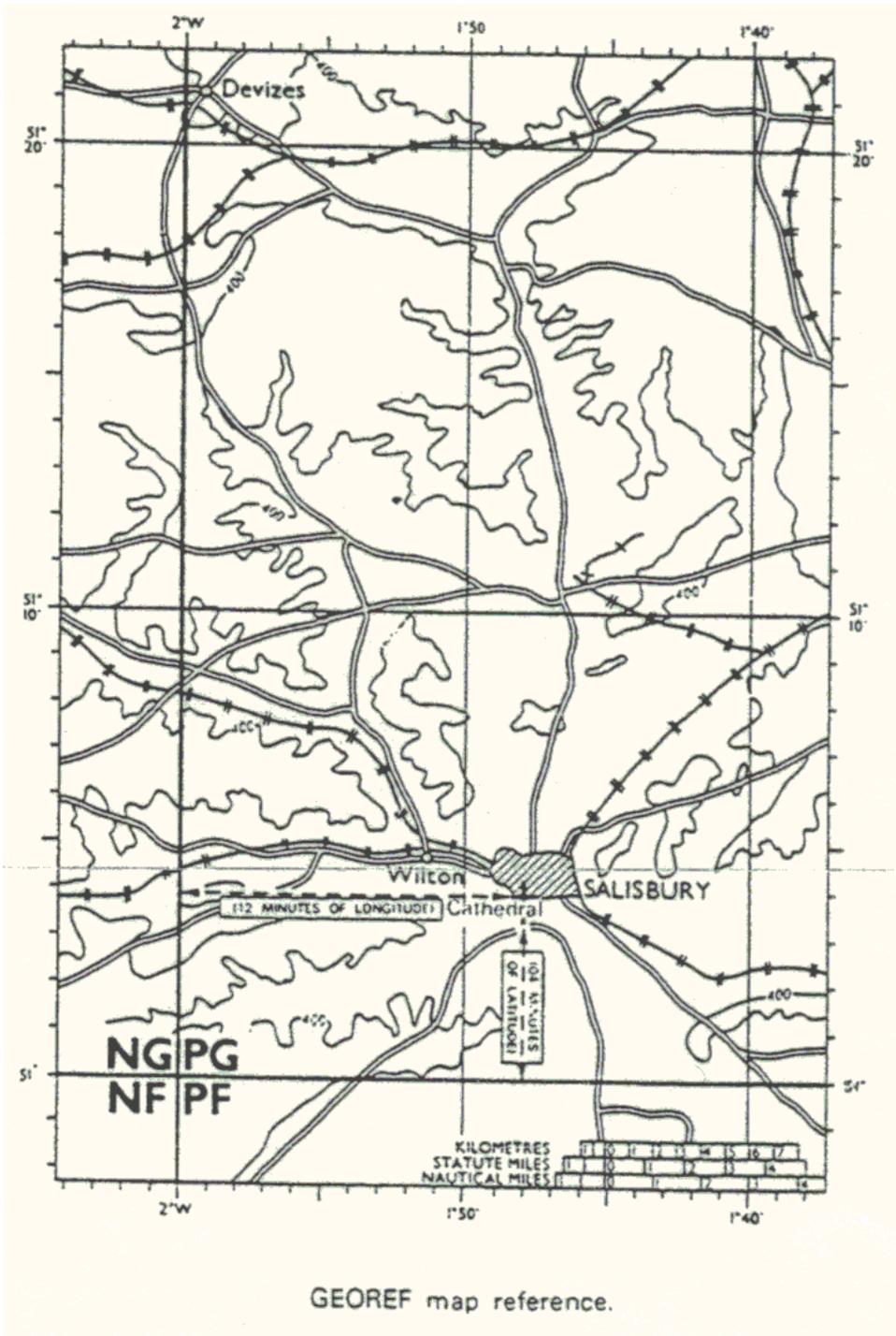
- Each 15 degree quadrangle is sub-divided into 15 one degree zones eastward from the western meridian of the quadrangle, lettered A to Q (omitting I and O). Each 15 degree is divided into one degree band of latitude northward from the southern parallel numbered A to Q (omitting I and O). A one degree quadrangle may be identified by four letters. Salisbury is identified by the letters MKPG. See figure below.



GEOREF one degree quadrangle identification letters.

- Each one degree quadrangle is divided into 60 minutes of longitude numbered eastward from its western meridian and 60 minutes of latitude numbered northward from the southern parallel. A unique reference of a point to an accuracy of one minute in latitude and longitude is given by four letters and four numbers. The first two numbers are longitude minutes and the last two are latitude minutes. The Salisbury Cathedral as shown below is represented as

MKPG1204. Each one degree quadrangle may be further divided into decimal decimal parts. Four letters and six numerals will define a location to .1 minute; four letters and eight numerals will define a location to .01 minutes.



For additional guidance and assistance contact NGA's Office of GEOINT Sciences (SN), Coordinate Systems Analysis Branch St. Louis, MO: 314-263-4171 (DSN 693-4171) Bethesda, MD : 301-227-3340 (DSN 287-3340)