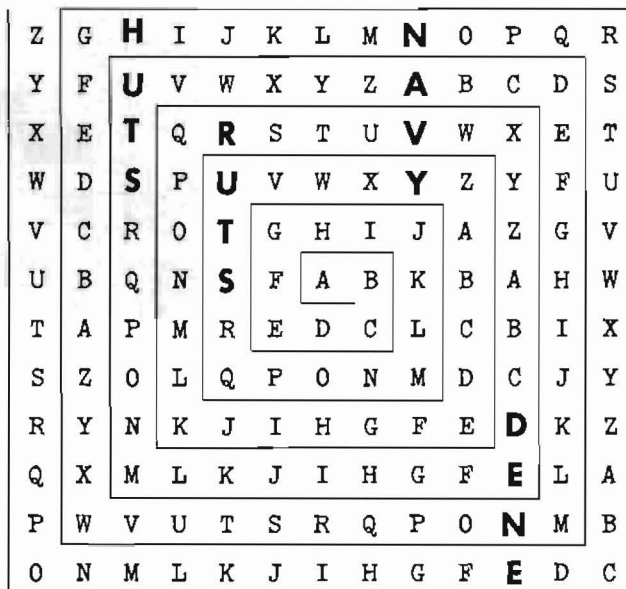


## *Spiraling Alphabets*

BEN ROGERS

The words HUTS, RUTS, ARMY, and DENE (British: "valley") have in common a property not too hard to discover. They are all transposable (HUTS = SHUT and THUS, RUTS = RUST, ARMY = MARY, and DENE = NEED). Suppose we replace ARMY with NAVY, so that our set of four words is now HUTS, RUTS, NAVY, and DENE. What more unusual, more difficult to discover, property do they now have in common? If the alphabet is written in a spiral, clockwise as shown below, over and over again until a 12 by 13 rectangle is formed, ending neatly with Z, the four words in question appear spelled out vertically.



What happens if you start with Z in the center and spiral the alphabet backwards? If you continue until you have a 26 by 26 square, you will find that you have generated these 8 four-letter words: HALO, HONE, FANS, DUDE, DORM, CHET, NIVA, ARAB; and one five-letter word: SHONE.