TIC-TAC-TOE PLAYED AS A WORD GAME

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In Problem 48 in *Your Move* (McGraw-Hill, 1971), David Silverman described a linguistic version of tic-tac-toe consisting of a stockpile of the words ARMY, CHAT, FISH, GIRL, HORN, KNIT, SOUP, SWAN and VOTE. Players alternately select words, and the first to collect three words sharing a common letter is the winner.

In the single-letter analogue of Silverman's game, players draw alternately from a stockpile of nine different letters; the first to select the letters forming one of a specified list of nine words is the winner. To make it easy to remember these words, they can be written in the form of a 3-by-3 word square in which both diagonals are also words.

Squares are easy to find if you allow abbreviations, acronyms, proper names or foreign words. However, I'm half-convinced that there is no solution with common everyday words. It's almost spooky how you can find seven words but not the eighth. My near-misses:

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N O S      A R E      H O P      B E D      F L U      D O S
E A T      S I N      E A R      O A R      A I R      E A T
W R Y      P O D      S K Y      W H Y      T E N      W R Y
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In the first square, the first word can be used in a sentence such as "The NOS have it" summarizing a vote. Change the N to L, and the W to D, and the first word, LOS, is the first half of Los Angeles. If given names are allowed, consider the second square with RIO. The third square uses the contraction HE'S; the sixth uses DOS, as in the phrase "dos and don'ts". There must be dozens or even hundreds of squares using words from, say, the Official Scrabble Players Dictionary, but these invariably employ less-familiar words than the ones in the squares above.

Ross Eckler generated an interesting set of squares which all use the French word EAU, found in English phrases like "eau de cologne" or "eau de vie":

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F O G      H O G      L O G      L O B      F O B      G O B
E A U      E A U      E A U      E A U      E A U      E A U
D R Y      P R Y      T R Y      T R Y      D R Y      T R Y
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