Generic form for a probably infinite sequence of Poulet numbers ie $2n^2+147n+2701$

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Abstract. In this paper I observe that the formula $2n^2 + 147n + 2701$ produces Poulet numbers, and I conjecture that this formula is generic for an infinite sequence of Poulet numbers.

The sequence of Poulet numbers of the form $2n^2 + 147n + 2701$:

: 2701, 4371, 8911, 10585, 18721, 33153, 49141, 93961 (...)

These numbers were obtained for the following values of n:

: 0, 10, 30, 36, 60, 92, 120, 180 (...)

Conjecture:

There are infinite many Poulet numbers $P$ of the form $2n^2 + 147n + 2701$ (see A214016 posted by me on OEIS for a subsequence of the sequence from above, i.e. Poulet numbers of the form $7200n^2 + 8820n + 2701$).

Observation:

Note the following interesting facts:

: for $P = 2701 = 37*73$ both 37 (= $2*17 + 3$) and 73 (=4*17 + 5) can be written as $17*m + m + 1$, where $m$ positive integer;
: for $P = 10585 = 5*29*73$ both $5*29 = 145$ (=8*17 + 9) and 73 (=4*17 + 5) can be written as $17*m + m + 1$;
: for $P = 93961 = 7*31*433$ both $7*31 = 217$ (=12*17 + 13) and 433 (=24*17 + 25) can be written as $17*m + m + 1$.

: for $P = 4371 = 3*31*47$ both 31 (= $2*17 - 3$) and 47 (=3*17 - 4) can be written as $17*m - m - 1$, where $m$ positive integer;
: for $P = 18721 = 97*193$ both 97 (= $6*17 - 5$) and 193 (=12*17 - 11) can be written as $17*m - m - 1$;
: for $P = 33153 = 3*43*257$ both $3*43 = 129$ (=8*17 - 7) and 257 (=16*17 - 15) can be written as $17*m - m - 1$. 
Observation:

Note the following subsequence of the sequence from above, obtained for \( n = 10^m \):

: 2701, 4371, 8911, 18721, 49141, 93961, 226801, 314821, 534061, 665281, 915981 (…)

obtained for \( m = 0, 1, 3, 6, 12, 18, 30, 36, 48, 54, 64 \) (…)