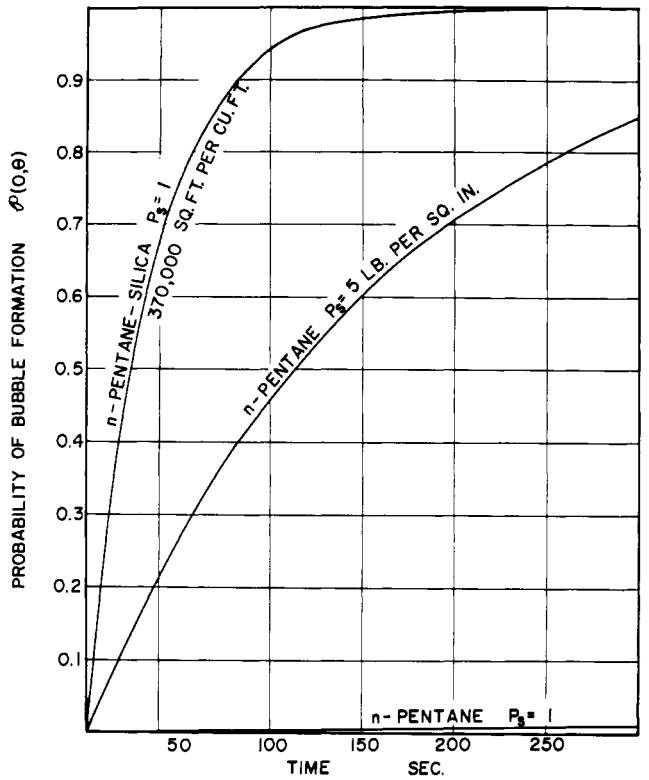

Figure 4. Probability of a bubble being formed in a cubic foot of *n*-pentane at 160° F.

would be 2.74×10^4 seconds, corresponding to 7 hours and 37 minutes, which may be compared to a mean time of 35 seconds associated with 1 cubic foot of *n*-pentane in contact with 370,000 square feet of silica. As a first approximation, the above area of silica per cubic foot of *n*-pentane decreases the attainable supersaturation pressure for a probability of bubble formation of 0.5 by a factor of 9. Such a marked change is significant and indicates that surface area may influence markedly the time of strain attainable with hydrocarbons. Such results are indicated by the work of Marboe and Weyl (*8*). The conditions associated with their investigation were sufficiently different, however, from those encountered in this study as to render direct comparison unprofitable. Earlier work (*9, 14*) did not permit the effect of a fivefold change in the area of the steel vessel exposed to hydrocarbon per unit volume of liquid phase to be detected. In the present study, the relatively large interfacial area between the silica and hydrocarbon apparently introduced a significant effect.

NOMENCLATURE

P = pressure, p.s.i.
P_s = supersaturation pressure, p.s.i.
$p()$ = probability of a bubble being formed
β = correction factor
Θ = time, sec.

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CORRECTION

In "Solubility of 1, 3-Butadiene in Water" [C. D. Reed and J. J. McKetta, J. Chem. Eng. Data **4**, 295 (1959)], Figure 3 is incorrect and should appear as follows.