1014-57-138 **Timothy D Comar*** (tcomar@ben.edu), Department of Mathematics, Benedictine University, Lisle, IL 60532, and **Kenneth Miller** and **Debra Witczak**. *Existence and Upper Bounds of Regular Stick Numbers of Knots and Links.* Preliminary report.

Let K be a topological knot or link. An $\alpha-$*regular conformation* of K is a polygonal embedding of K in three-space such that each edge (stick) has unit length and adjacent sticks meet at an angle of α. The $\alpha-$*regular stick number* of K, $S_{1,\alpha}(K)$, is the minimal number sticks needed to form an $\alpha-$regular conformation of K in space. We describe a recipe for constructing $\alpha-$regular conformations of any K and any $\alpha \in (0, \pi)$, which relies on the construction of a particular Seifert surface for K. This recipe provides upper bounds for $S_{1,\alpha}(K)$ that are generically not sharp. We also describe a technique for obtaining sharper upper bounds for knots of low crossing number that posses certain symmetries. (Received August 01, 2005)