The two most basic families of examples of Anosov flows in dimension three are the geodesic flows of hyperbolic surfaces and the suspension flows generated by Anosov diffeomorphisms of the 2-dimensional torus, both families also called the algebraic Anosov flows. Non-algebraic Anosov flows where constructed for the first time in 1979 and 1980 (Franks-Williams for the non-transitive case and Handel-Thurston for the transitive one) by the use of surgery procedures. Later, Goodman described a surgery procedure where, given an Anosov flow and a periodic orbit, it is possible to perform a Dehn surgery in a tubular neighbourhood of this orbit and obtain a new manifold with a Anosov flow. As a more sophisticated tool, Fried proposed another procedure to perform a Dehn surgery along a periodic orbit which can be interpreted as an infinitesimal version of the Goodman surgery. The main advantage of the Fried's procedure with respect to the Goodman surgery is that we can keep track of the topology of stable/unstable foliations of the original flow during this surgery. The problem is that, although the new flow preserves two transverse foliations with expansive and contractive properties, it is not direct that this flow is Anosov. (The new flow is a so called *topologically Anosov flow*.) Our aim is to show that, given an Anosov flow in a 3-manifold, doing a Goodman surgery in a neighbourhood of a periodic orbit is orbitally equivalent to doing a Fried surgery along the same orbit and with the same twist parameter. As a consequence, we see that the Fried surgeries preserve the class of Anosov flows. This work is in the context of my PhD thesis, under the direction of C. Bonatti.