Fifty-some years ago, our friend, Glidden S. (Glid for short) Doman could not have predicted that far in the future he might be prospecting in the world of giant wind mills! The pursuit of modern wind (mill) turbine technology has led him into developing rotors in the 200 to 300 ft. diameter range in several countries around the world. Glid may not have thought he would even be in the helicopter (or rotor) business when he graduated from the University of Michigan in 1942 with a B.S. in Aeronautical Engineering. But he was soon caught up in the helicopter world, founding his own company, Doman Helicopters, within 3 years of graduation (after a stint with the Engine Div. of Fairchild and then Sikorsky Aircraft).

Glid created the Doman Helicopter Company in August, 1945 with the purpose of developing new rotors based on a semi-rigid, four-bladed hingless gimbaled-hub rotor. The aim of this design was to eliminate the coriolis forces by using a non-rotating rotor system ball joint along with a constant velocity drive shaft universal joint within a stationary pylon — in essence, a vibration-free and low fatigue-stress system.

With the development of the first rotor, his team began tests of the rotor installed on their LZ-1 (Fig.1) helicopter (using the Air Force-loaned R-6 fuselage). Successful demonstrations of the LZ-1 quickly led to the need for more capital and Doman-Frazier Helicopters was incorporated. A further need for manufacturing space for development of the LZ-1A and LZ-2 (with Doman-designed fuselage and systems) resulted in a move from Stratford to Danbury, CT in late 1947, followed by a company realignment and a return to the name, Doman Helicopters, Inc.

Further improvements to the concept were embodied in their LZ-4 (Fig.2) which was purchased by the then-suffering Curtiss-Wright Corporation in 1950 in an attempt at diversification into the helicopter business. Called the CW-40 by Curtiss, flight operations/demonstrations were flown by Doman Helicopters as part of the deal; but no further business developed for Curtiss-Wright for they had stepped on HST's toes in the
leading to another rotor pioneer, Wayne Wiesner, who was also a member of that same Boeing group).

In September 1953, Stanley Hiller announced the purchase of production rights! The U.S. Army had shown an interest in the helicopter and the proposed Army version had flown in April 1953. The Hiller acquisition was engineered by Colonel Bill Bunker of the Army Transportation Corps. With Hiller H-23 production declining towards the end of the Korean War, it seemed that there was a need for the Hiller-Doman sized H-31