



Harold H. Doiron, PhD

Dr. Hal Doiron is the retired VP, Engineering of InDyne, Inc. and is currently a consultant to NASA and launch vehicle design companies. He holds a BS Physics degree from The University of Louisiana-Lafayette (1963), and MS and PhD degrees in Mechanical Engineering from The University of Houston (1967, 1970).

He spent the first 16 years of his career at NASA-Houston where he developed the Apollo Lunar Module landing dynamics computer simulation that was used to guide landing gear design for toppling stability and energy absorption performance; landing techniques development; and to support Apollo landing site selection. He performed docking dynamics studies for the Skylab Program and led the Space Shuttle design integration team that successfully eliminated coupled structural/propulsion system vibration instability, or “pogo instability” named after pogo stick motion.

Dr. Doiron then spent 9 years at Reed Tool Co. (1979-1988) developing advanced energy exploration drilling technology as Manager of Technical Services, Manager of Systems Engineering, and Director of the Diamond Products Division. As a Senior Manager at McDonnell Douglas Space Systems (1988-1997), his team computed the on-orbit vibration response of the International Space Station for dynamic events such as spacecraft docking, berthing, re-boost, and rocket plume impingement to define design limit loads and structural strength requirements. He also led a group that performed dynamic modeling, troubleshooting, root cause analysis, and flight anomaly resolution for the Space Shuttle and pogo vibration prevention for the Delta-IV rocket. He took early retirement from McDonnell Douglas in 1997 to join InDyne Inc. as its first VP, Engineering to help the company expand into aerospace engineering services for NASA, military and aerospace industry clients.

Because of his Apollo-era lunar landing dynamics experience, he was selected to be a member of NASA's Standing Review Board for the Mars rover “Curiosity” entry, descent and landing for the six years of its development prior to its successful Mars landing in August 2012. His experience with complex systems dynamic simulation models used for safety-critical applications, led him to organize The Right Climate Stuff Research Team of NASA Apollo Program veterans, in an independent, objective review of the global warming issue. This team developed and validated a simple model for earth surface temperature based on Conservation of Energy and has published several reports on their website: [www.TheRightClimateStuff.com](http://www.TheRightClimateStuff.com). They have made presentations at several climate conferences documenting their research conclusions and emphasizing that the present global warming alarm results from un-validated climate simulation models that have demonstrated absolutely no skill in predicting the effects of CO2 on climate. This research team has been an advisor to the Trump Transition Team at the EPA and recommended EPA public policy decisions should be guided only by physical data analyses and models validated by their accurate explanation of available physical data.