
# Alumni Spotlight

Donald F. Gluck ‘59M spent his distinguished career helping to develop and enhance thermal, fluid and cryogenic energy for the aerospace industry. He is currently retired as a private consultant for the Air Force Research Laboratory.

Don began his career at the NASA Glenn Research Center conducting some of the earliest work on liquid hydrogen pressurization and transfer, which was used to advance the Mercury and Apollo programs.

In 1962, he joined North American Aviation where he worked specifically on Apollo propellant tankage problems including sloshing, rotating flows and hydrodynamics, and led a program of microgravity drop tower and KC-135 aircraft tests.

After remaining with the company through its merger with Rockwell-Standard, he focused his work on refrigeration and power cycles, and also became lead cryogenics engineer of the Teal Ruby satellite sensor proposal. While at Rockwell, he also received his doctoral degree in aerospace engineering from the University of Southern California in 1972.

After his involvement with the Teal Ruby project, Don worked for The Aerospace Corporation’s thermal control department as a thermal engineer. Tasked with supporting the Air Force’s Space and Missile Systems Center (SMC), he provided guidance on the SMC’s Solwind and Milstar satellite programs, and built the thermal math models for those spacecraft.

Following the successful launch of those programs, Don became the manager of the satellite heat transfer section for six years, where he gained extensive knowledge of acceptance and qualification thermal tests at all levels of satellite assembly.

Leaving Aerospace in 1994, he decided to use his expertise to independently support the Air Force Research Laboratory in advanced thermal control technology, particularly making technical contributions to the capillary pumped loops and loop heat pipe fields.

Over the course of his career, Don also wrote or co-wrote the first and second edition of Spacecraft Thermal Control Handbook, Chapter 8: “Mountings and Interfaces,” and is a co-inventor on the US patent “Multifunctional Capillary System for Loop Heat Pipe” issued in 2001.