



IEEE

Arrowhead Section Meeting Notice

Date / Event:

Thursday, September 29, 2016

Dinner & Electronic Timekeeping Presentation

Guests are welcome!

Time:

5:30 pm – Social Time w/ Cash Bar

6:00 pm – Dinner from event menu
Presentation follows dinner

Reservations by Noon, Wed., Sept. 28th

Bruce Howell at brucehowell@ieee.org

218-343-5546 (leave message)

Dinner & Presentation Location:

Tycoons Ale House, 132 E. Superior Street
Duluth, MN, 55802 – 2nd floor Mtng room

Watch collector and IEEE Member, Stan Burns, will present details about early electronic time-keeping technologies. Before the ubiquitous quartz watch movement, Bulova commercially introduced a one-transistor tuning fork oscillator watch called the Accutron, circa 1960, and Hamilton commercially introduced an oscillating motor electro-mechanical watch, circa 1957, called the Hamilton Electric. The history and theory of operation of these diametrically different early designs will be presented along with a display of representative time-keeping movements. Suggestions for finding and using them in the 21st century will be discussed too.

Arrowhead Section Officers: **Chair:** Terence Larson; **Vice Chair:** Vacant; **Sec/Treas:** Bruce Howell