



Univac Signal Processing & NEXRAD

From David BONDURANT <dbondurant@mac.com>

Date Tue 9/9/2025 3:41 PM

To Lowell Benson <la.gj.benson@comcast.net>

Lowell:

Pikes Peak Life Member Affinity Group is hosting a talk on September 30 "Univac Signal Processing & NEXRAD". I would to invite you and others from VIP Group to the event if you would like.



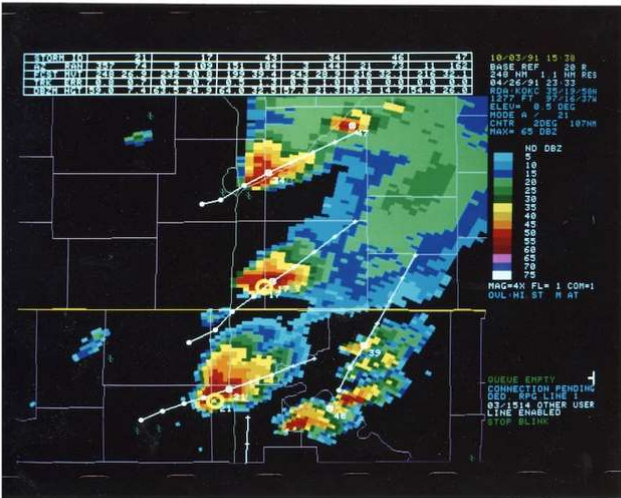
Pikes Peak LMAG September Meeting
vtools.ieee.org

Join the Pikes Peak LMAC for a Computer History Presentation

Univac Signal Processing & NEXRAD

David Bondurant & Les Nelson, Former Univac Signal Processing Engineers

We have become accustomed to seeing weather maps nightly plotting future violent weather in advance and we receive severe thunderstorm, flash flood, hurricane, tornado warnings on our phones and TV stations. Ever wonder how the NexRAD doppler radar system was developed?



In July, 3 former Sperry Univac engineers had a reunion in Excelsior, Minnesota to reminisce about the development of signal processing at Univac over 50-years ago and the development of the Next Generation Radar System (NEXRAD) by a joint program office of the National Weather Service, Federal Aviation Administration, and US Air Force Weather service starting in 1979. This is the story of Univac involvement with FAA and Joint Program Office and the development of a Programmable Signal Processor at Unisys/Paramax Systems leading to the NEXRAD Radar Data Acquisition (RDA) System, a system which has been in the field at 159 sites in the US and military bases overseas for more than 34-years.

🕒

DATE AND TIME

📍

LOCATION

✉️

HOSTS

📄

REGISTRATION

Date: 30 Sep 2025

Time: 06:00 PM MDT to 07:30 PM MDT

📅 Add Event to Calendar

📱 iCal

📅 Google Calendar

Join Zoom Meeting

<https://us02web.zoom.us/j/83705899930>

pwd=Uln430ziqqg1Zbn4VbSTu

Meeting ID: 837 0589 9930

Passcode: 582783

Pikes Peak Section

Pikes Peak Section Affinity Group,LM

Binghamton Section Affinity Group, LM

Binghamton Section Chapter, C16

Binghamton Section

Contact Event Hosts

Starts 10 September 2025 12:00 AM MDT

Ends 29 September 2025 12:00 PM MDT

No Admission Charge

Registration not yet Open

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SPEAKERS

David BONDURANT

Biography:

David Bondurant is a IEEE Life Senior Member who has been involved with the computer and semiconductor industry for 55-years. He was a computer architect at Control Data, Sperry-Univac, and Honeywell. He was involved with the government-sponsored advanced semiconductor program called VHSIC (Very High Speed Integrated Circuits) at Univac & Honeywell where he developed microprocessor and ASIC semiconductor products in bipolar CML, CMOS, and radiation hard CMOS. He was involved with emerging non-volatile RAM marketing at industry leading companies, Ramtron (FRAM), Enhanced Memory Systems (EDRAM, ESDRAM, ESRAM), Simtek (non-volatile SRAM), and Freescale Semiconductor/Everspin Technologies (MRAM).



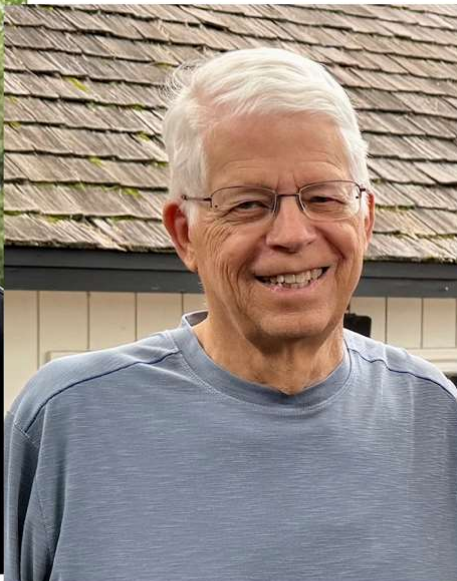
Email: dbondurant@ieee.org

Address: United States

Les Nelson

Biography:

Les Nelson is an IEEE Life Member who has been involved with Military & Aerospace industry for over 41-years. Coming from a small Minnesota farm, he graduated from the University of Minnesota and began working for Sperry Univac (and its successor companies - Unisys/Paramax Systems/Loral/Lockheed Martin). He became a Senior Systems Engineer and Technical Director. He was involved with several P-3C ASW aircraft systems provided to the US Navy and several other countries and on other classified programs. He was involved with developing signal processing microprograms and software for a Univac Programmable Signal Processor IR&D program and participated in microprogram and software development of Unisys/Paramax Systems NEXRAD Programmable Signal Processor from feasibility study to prototype development to final production over an 11-year period. He is proud to have participated in a program that has direct daily impact on millions of people and organizations



Email: lnelson46@gmail.com

Agenda

Introductions

Presentation

Q&A

David Bondurant

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