Golden Grads
Early Sandia master's program in spotlight at UNM Engineering graduation

By Nancy Salem

Commencement this year at the University of New Mexico School of Engineering featured a notable group of Golden Grads who earned their degrees 50 years ago. Standing among them were nine Sandians who were part of the first class of the Techni-
cal Development Program, or TDP, one of the Labs’ ear-
liest continuing education efforts.

Sixteen-year-old engineers came to Sandia in 1960, drawn by the promise of challenging technical work and TDP — a half day on the job at the Labs and a half
day of classes at UNM at full salary and with a master’s degree in hand two years later.

“TDP was a fantastic program,” says Heinz Schmitt, a member of the inaugural class who went on to
become a Sandia VP. “We came in with bachelor’s degrees and Sandia provided for our achieving a mas-
ter’s and valuable work experience. It was a marvelous continuing education opportunity for professional
engineering people.”

The UNM curriculum included a variety of disci-
plines in math, science, and engineering so the gradu-
ates would be well-rounded with a diversified portfolio.

“Sandia management understood that the people they
needed had to be multidisciplined,” Heinz says.

And the class experienced first-hand a wide range of
work being done at the Labs. Each participant was
required to rotate through two organizations other
than the sponsoring group. “It was a great opportunity
to see the Laboratory and learn its culture,” says Heinz,
who chose the Computing and Product Development
programs and stayed in the latter.

Sandia’s earliest training efforts date to the 1950s.
TDP was launched as a pilot program in 1959 with its
first full class starting the following year. It was
designed to create a pool of engineers with graduate-
level skills. During its nine years, TDP helped 465
employees earn master’s degrees in mechanical or elec-
trical engineering.

“A large number of our key people, including multi-
ple executives and directors, earned advanced degrees
through the program,” says Sandia VP and Chief Tech-
nology Officer Steve Rottler.

Bonds of friendship
TDP was a pragmatic training technical staff at the
master’s level became the norm. But it was the fron-
t-rune of subsequent university programs offering Sandians advanced degrees, such as One Year on
Campus, or OYOC; the Special Master’s Program; and the
Doctoral Studies Program.

“TDP was one of the foundations of education at
Sandia,” says Charline Wells, senior manager of Corpo-
rate Learning & Professional Development Dept. 3520.

“It reinforced the Labs’ long-term commitment to
ensuring employees are prepared with the right set of
skills for their current job and to reach their full poten-
tial and take us into the future. It’s a legacy.”

TDP also forged a close relationship between Sandia
and the UNM School of Engineering, where most of the
participants studied. “UNM Engineering has a rich his-
tory with Sandia,” says Catalan Roman, the school’s
dean.

At this year’s School of Engineering graduation
reception, the Golden Grads shared stories of their time
in TDP and of the bonds they formed.

“I wanted to get out of New York, and thought I
would fit better at Sandia than at Bell Labs where I pre-
viously worked,” says Heinz, who earned a bachelor’s
degree in mechanical engineering at the Polytechnic
Institute of Brooklyn before being recruited by Sandia.

“It was rewarded by a diverse range of technical and
managerial experiences, and TDP was a key to making
that happen for me.”

Bob Alvis came from the University of Oklahoma,
where “the smartest guy in the class” urged him to take
Sandia’s TDP offer. “I didn’t have a dime to my name,
and borrowed to get to Sandia,” Bob says. “It was a god-
send to be put through graduate school.”

He says TDP changed the makeup of the Lab. “They
had a lot of bachelor’s degrees,” says Bob, a mechanical
engineer who worked in the weapons program and
became a division supervisor. “TDP saturated it with
masters’.”

John Kane, a University of Nebraska electrical engi-
neer, picked Sandia and TDP for the chance to get a
master’s he couldn’t otherwise afford, and because he
didn’t want to go to school east of the Mississippi.

“That was my strategy, and it turned out to be a great
thing for me. I stayed at Sandia 40-plus years.”

John says the opportunity to change careers kept
him engaged at the Labs. He worked in equipment
design, advanced electromechanical components, sys-
tems, technical security systems, and intelligence,
where he was a division supervisor.

Anthony Russo, who came from electrical engineer-
ing at the University of Notre Dame, says the class
members had a lot in common. “We were all top per-
sons from the schools we came from, and helped each
other out,” says Anthony, who worked in aerodynam-
ics, fluid mechanics, and thermal sciences. “It was very
friendly.”

Electrical engineer Paul Stokes came from North
Idaho State University and worked in arms control
and intelligence. “I came with no grand plans,” Paul
said. “I thought I might go to California. But after a
few years, I liked what was going on at Sandia and
liked the area. The TDP program was a big reason for
that.”

Sandia/UNM connection
Heinz, Bob, John, Anthony, and Paul stayed at
Sandia for more than 35 years and retired within a few
years of each other, from 1998 to 2001. They say TDP
brought them to the Labs and to each other. “It was a
shared experience,” Bob says. “We had a lot of fun.”

“I had a relationship with 30 or 40 people through-
out my career,” John says.

Sandia’s latest educational programs offer more
options in schools and curriculum, and feature targeted
programs such as computer science software engineer-
ing. Despite the broader choices, many Sandians still
attend UNM.

“I’m thrilled that we’re deepening and strengthen-
ing our relationship,” says Dean Roman. “Some of the
outcomes we’re working on include increasing intern-
ship opportunities for our students, providing more top
talent for Sandia, and expanding our strategic research
 collaborations.”

For Sandia’s members of the 1962 Golden Grad class
of the School of Engineering, the place they started —
TDP — will always be special.

“For me the program was a life-changer,” Heinz says.