

Col. (Ret.)

Gary Payton

Class of 1971

CADETS ENROLLED IN THE Human Spaceflight course at the United States Air Force Academy have the advantage of learning about the history of the “space race” from someone who actually lived it.

Col. (Ret.) Gary Payton '71 is currently serving as a distinguished visiting professor in the Schriever Chair in Astronautics.

Because of his lengthy military and civilian career, Payton is able to share real-world stories and lessons learned with the next generation of Air Force leaders. And he is thoroughly enjoying the opportunity.

“When I was a cadet, we didn’t have as much insight into the real world as we yearned for,” Payton says. “Our AOCs were our main insight into the ‘real Air Force.’ Coming back here, and offering at least some of the real Air Force to the cadets, is rewarding for me.”

His contribution to the education of current cadets has not gone unnoticed. Payton was presented with the USAFA Outstanding Academy Educator Award in 2014.

“It’s voted on by your peers — the other folks that you work with hour by hour, day after day,” Payton says. “Truthfully, I was stunned. I didn’t expect anything like that.”

Payton admits that it feels like his 40-year career has come full circle now that he’s back at his alma mater. His current job gives him a chance to witness the caliber of current cadets who attend USAFA and he knows the nation is in good hands.

“The cadets are a lot better than we were, that’s for sure,” Payton suggests. “We were a lot less mature than the cadets are these days. We were 5-foot, 10-inch bags of testosterone — very competitive, very aggressive, very confident.

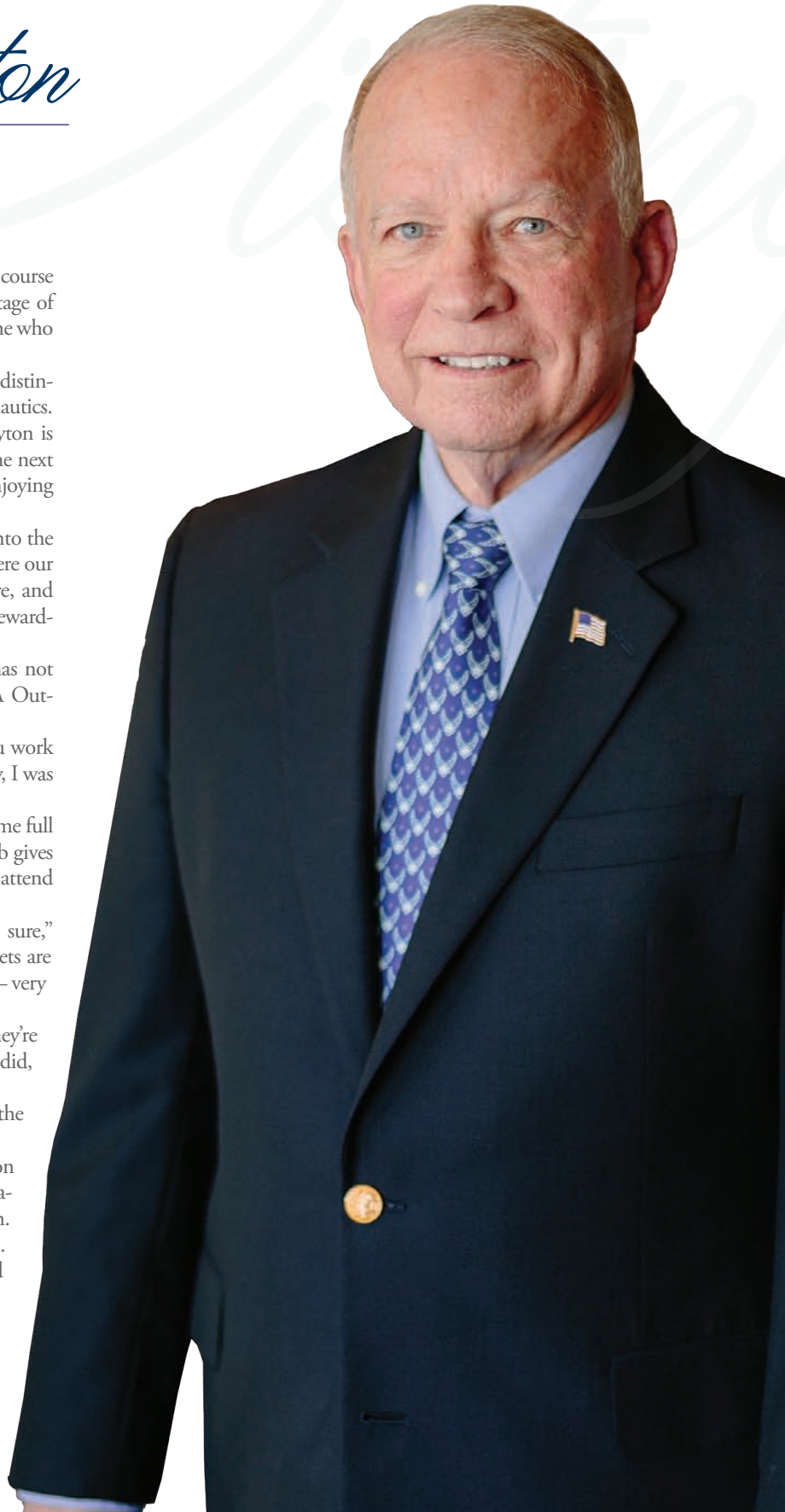
“They’re not like that today. They’re competitive, but they’re measured. And they know how to focus better than we did, and that’s critical.”

The level of focus is surprising, Payton says, due to the number of distractions current cadets encounter.

“We had fewer distractions when we were cadets,” Payton explains. “We had TV, cars and girls — that was fundamentally it. We had one payphone in the entire squadron. Nowadays, of course, you’ve got Twitter, Facebook, email. I probably wouldn’t have done nearly as well as I did if I’d had all those distractions.”

He adds that current cadets appear a bit more goal-oriented than his generation.

“Everything they do day-by-day here is preparation for their eventual goal,” he notes.





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Payton, too, had a few goals. But he admits he never looked far beyond his potential next assignment. Nonetheless, he would go on to develop an impressive resume that would lead to his selection as a 2016 USAFA Distinguished Graduate.

Developing Interests

Payton’s parents told him he was expected to go to college, but they didn’t have money to contribute to the cause. He was going to have to find a way to pay for advanced education on his own.

His father died when Payton was in sixth grade, forcing his mother to work extra hard to support the family.

A few years prior, Russia had launched its first satellite — Sputnik — into space. Payton says he was in the right place at the right time for expanded math and science opportunities.

The “Sputnik Generation,” as he calls it, was called upon to ramp up its educational prowess and help the U.S. better compete on a global scale.

Payton would eventually take Saturday math classes and plenty of science courses to get ahead in those critical subjects, all with an eye toward improving his chances of going to college and succeeding.

“Fortunately, my brother — who is eight years older than I am — told me about this new thing called the Air Force Academy,” Payton recalls. “He said they didn’t charge tuition and, in fact, they paid you when you go there.”

As an eighth grader, Payton would research that college opportunity and decide that he would make every effort to gain an appointment. As he pursued his goal, Payton developed a keen interest in all things mechanical and military — ships, airplanes and rockets.

“When John Glenn launched, I was more interested in the Atlas rocket underneath him than the actual flight of an American around the globe,” Payton recounts.

College Boy

The first time he applied to the Academy, Payton tested well academically and athletically. But unfortunately he failed his vision test — 20/20 in one eye and 20/40 in the other.

He headed off to a civilian college instead, attending for a year and involving himself in ROTC (reserve officer training corps).

During his civilian college interlude, Payton found out that eye charts used by military and civilian optom-

etrists were all the same, so he devised a plan to memorize the chart and reapply to the Academy.

“I said I was going to get in this place one way or the other,” Payton laughs. “I applied again and used my newfound skills at memorizing letters — line 9, by the way, was the right one.”

Sure enough, Payton received appointments to the Air Force Academy and the Naval Academy. He chose USAFA.

In retrospect, Payton says, his single year at a civilian university prepared him well for his time as a cadet. He’d successfully “broken the apron strings” and learned how to take care of himself. Plus, he’d learned better study habits and was one step ahead academically compared to some of his fellow classmates.

With considerable assistance from his ALO (air liaison officer), Lt. Col. Ray Waeyaert, Payton says he was well prepared for the academic and mental challenges he would face in Colorado Springs.

“He was fantastic and very knowledgeable about the Academy,” he recalls. “He was very blunt about it. He said it was going to be the toughest thing you’re going to do in your entire life.”

Day One and Beyond

When they first arrived at the Academy, Payton and his classmates enjoyed three days of relative quiet as they were issued combat boots and uniforms, and learned a few important facts about their time at the institution.

But on the first morning of basic cadet training, all hell broke loose.

“I’d never heard such derogatory terms ever in my prior life,” he recalls. “It was just stunning. Fundamentally, it was tear you down from what you were and then rebuild you in the mold that the Air Force needs.”

There were moments on that first day that Payton expected to quit. But after he survived the initial onslaught, he vowed to graduate and prove his worth.

“They had already taken too much away from me,” he comments. “I’m going to earn it all back.”

In the end, he’s glad he stuck to it. “It was all worthwhile,” Payton smiles.

The key lessons he learned while a cadet were how to focus, how to follow through on a mission, how to be a follower and how to be a leader. Those lessons proved valuable at various stages of his career.

Career Goals

Payton didn’t think he had much of a chance at becoming an astronaut, so he zeroed in on a career in rockets and missiles. ►



Pictured in 1994, Gary Payton (left) during his flying days.

“That was until I got my first ride in a jet,” he recalls. “Wow, that changed my mind. But then I said, ‘why can’t I do both? Why can’t I be an engineer on the space side of the Air Force and be a pilot, too?’”

Following graduation, Payton would head to Purdue University to pursue a master’s degree in aeronautical and astronautical engineering. Once his education was completed, Payton would marry his sweetheart, Sue, and together they headed off to pilot training in Alabama.

Payton’s most memorable lesson during pilot training came as a result of his final check ride. Despite less-than-ideal weather conditions, he agreed to take his final test. He ended up flunking.

“There was my first lesson in being too aggressive,” he recounts. “Student pilots make that mistake all the time. I just made it on a very critical flight.”

The Final Frontier

Despite the poor showing on his check flight, Payton’s first Air Force assignment was as an instructor pilot. As the post-Vietnam drawdown forced the Air Force to shed pilots, Payton then went to a nonflying job, launching military satellites on expendable launch vehicles at Cape Canaveral.

“So there I was, in rockets ... finally,” he laughs.

Payton’s job was to direct his team as they attached spacecraft on top of the different expendable launch vehicles — Titan, Atlas and Delta rockets — and prepared them for launch.

Payton says the satellite would typically arrive at Cape Canaveral 30 or 33 days before launch and the goal was always to launch on time.

“You don’t want to be the guy who holds up a launch,” Payton explains, noting that any delay would cost millions of dollars. “So I developed a philosophy. Did we work successfully enough today to get 3 percent closer to launch? How much progress have we made today? That mentality has served me well ever since.”

Payton would then transition to a Spacecraft System Program office, before becoming a payload specialist for the relatively new Space Shuttle program.

“They invited me to join the payload specialist program,” Payton recalls. “NASA needed a larger crew than just two or three, so they designed a vehicle to hold seven. It was no longer totally about flying the vehicle. The job was on-orbit operations.”

Payton would be assigned to STS-51C, the 15th Space Shuttle flight and the first strictly military mission that was highly secretive.

“NASA had grown up in a world where the spotlight is on all the time,” he says. “Here, the military comes in the door and says, ‘you can’t talk about launch date, you can’t talk about landing date, you can’t tell anybody how high we are on orbit, and you can’t tell anybody what we’re doing on orbit.’”

“We didn’t have any pre-launch press conferences, because what can you say? There were no post-launch press conferences. It was truthfully five GIs going off to do a military mission.”

On a more personal level, Payton says the entire space experience was extremely memorable.

He noted that the launch itself “definitely gets your attention.”

“It is so loud that the whole vehicle shakes,” he explains. “If you’ve ever been at a rock concert and stood close to the speakers, and they had the amplifiers up, you can feel the noise on your body. It’s that feeling but multiplied by 100,000.”

Once the Shuttle reached orbit, Payton says he found himself in “a very benign and fun environment.”

Career Highlight

Payton would go on to serve in a series of increasingly more responsible jobs at the Pentagon. During that time, Payton had the opportunity to brief President Ronald Reagan concerning progress being made within the Strategic Defense Initiative.

“That was pretty good for a little lieutenant colonel,” he laughs.

After retiring in 1995 with the rank of colonel, Payton took a job with NASA to continue his work in the space race.

The end of the Cold War meant the Air Force was no longer as interested in high-tech spacecraft, Payton notes. NASA, however, continued to pursue such technological advances.

“The high technology spacecraft that I was so committed to ... the Air Force started throttling back on all that. They started throttling back on aeronautics also ... all the things I was interested in,” he explains.

Payton would help develop new technologies for space, including better propulsion systems, improved turbo pumps and new test vehicles — including the X-37.

After a brief stint with the private sector’s ORBIMAGE (a commercial satellite imaging company), he would head to the Missile Defense Agency and later become the deputy undersecretary for the Air Force’s Space Programs.

“The diversity in my career, looking back on it, surprises me,” Payton admits. “How did this little boy from the Midwest end up doing this suite of diverse things. I got to do so many different, rewarding things. My main concern is ... did I contribute enough?”

Full Circle

Payton says he appreciates the chance to educate and inspire current cadets in his role as instructor at the Academy.

In his classes, Payton says he tries to expand his students’ knowledge of important historical figures from the Air Force’s past — Doolittle, Arnold, Schriever and the like.

Another goal is to go beyond equations and provide actual examples of how to apply the knowledge imparted at USAFA.

“I am a guy who can offer those real-world experiences, both from the flying world and the space world,” he explains. “It’s a one-year job, so every year is a renewal. So I guess some day I won’t do very well and they’ll kick me out.”

In addition to his current teaching role, Payton also is involved in the Challenger Learning Centers program. The centers help encourage the younger generation to pursue careers in STEM (science, technology, engineering and mathematics).

“When Challenger went down, I lost five friends,” Payton explains. “The families of the Challenger crew wanted something more than just ceremonies and flyovers to remember the crew. So they started the Challenger Centers nationwide. The entire nation has finally realized that we can no longer turn our back on that kind of education. It’s fun being a part of that.”

Payton and his wife also sponsor undergraduate scholarships at Purdue University and Eastern Illinois University.

A Distinguished Graduate

Payton admits that he was shocked at the “totally unexpected” announcement that he would be honored as a distinguished graduate.

“It’s hard for me to believe that I belong in the same category of folks like Paul Kaminski or Kevin Chilton,” he says. “It’s a very humbling honor.”


He says he owes a debt of gratitude to his brother, who suggested applying to the Academy, and to his wife and daughter, who were supportive throughout his career.

“The smartest thing I ever did was marry this petite, blonde, athletic girl from the Midwest. We met on a blind date right at the end of my Doolie year,” he recalls. “Nowadays, when I say ‘we’ or ‘our’, it is really plural. We are a team, shoulder to shoulder. None of this would have been possible without her.”

He also thanks his squadron mates from the Class of 1971.

“The camaraderie that we built during the four years here is unequalled,” he says. “And we’re still dedicated to each other.”

He also credits his Second Squadron Air Officer Commanding, Maj. Gary Tompkins, for setting an early example of what an Air Force officer should be. Later retiring as a colonel, the former MISTY FAC pilot brought real world Air Force experience to his young charges.

“His leadership and his standards of excellence were something that we yearned to live up to,” he notes. 



Gary and Sue Payton