STATE OF THE UNIVERSITY ADDRESS
P. BARRY BUTLER
AUGUST 16, 2019
Thank you, **Chairman Hosseini**, for opening today’s program and for all the work our Board does to make Embry-Riddle an outstanding university. Your pride in this institution and confidence in our future speaks for our entire Board of Trustees.

Our Board, administration, faculty, staff and students share a passion for Embry-Riddle. That passion fueled accomplishments throughout 2019. Together, we can work to get even better. We have a tool to help us focus our efforts, prioritize our resources and track our efforts: our five-year Strategic Plan. Since the Board of Trustees approved it last year, this document has guided our decisions on budgeting, academic programs and our service to students. Our Strategic Plan is the GPS that will steer us to becoming a better place to learn and a better place to work.

What have we accomplished in our first year of the plan? What are the high-priority challenges for the coming year? I am going to share an overview of our progress to-date because, as the Chairman pointed out, “It’s not me. It’s not the leadership team. It takes all of us working together to accomplish what we have set out to do.”

It has been a successful year for Embry-Riddle. I could end my presentation right there. Through your outstanding work, we have a lot to celebrate and we have built the foundation for even more significant accomplishments. Let’s look at how far we have come and areas where we still need to focus our energy and resources.

I am happy to announce that we have added three outstanding individuals to our Board of Trustees. Our Board members bring incredible expertise, wisdom and resources to this institution. Collectively, they bring Embry-Riddle an impressive array of talents: financial knowledge, executive leadership, running prestigious universities and leading at the highest levels of the U.S. military … We have it all.

Our three new members add to that expertise. Scientist-astronaut **Janet Kavandi** directs the NASA Glenn Research Center. Dr. Kavandi was a mission specialist on three Space Shuttle missions. She is a former Boeing engineer.

**Neal J. Keating** is president and CEO of Kaman Corporation. He is a global leader among aerospace executives. Before joining Kaman, he held leadership roles at Hughes Supply and Rockwell Collins.

**Steve Nordlund** is vice president and general manager of Boeing NeXt, which is defining the future of urban, regional and global mobility. He has also worked for Insitu and IBM. For eight years, he was the chief information officer for Embry-Riddle.
Have a reputation for personal attention to student success.

In a previous State of the University address, I mentioned how everybody in this auditorium and across the entire university can contribute to student success. Your job description doesn’t matter. Where you are located doesn’t matter. We all contribute to our reputation for personal attention. When students leave Embry-Riddle to begin their professional career, they will remember what we did for them. They will remember the individual attention they received – whether it came from staff, faculty, an adviser or an instructor pilot.

Our residential campuses in Daytona Beach and Prescott primarily serve 18 to 23-year-olds. Personal attention matters to these students. They are at a critical time in their lives as they make the transition from high school to college. Our Worldwide student population is typically older. They have a lot going on in their lives. Personal attention makes them feel more connected to Embry-Riddle.

The third part of the vision relates to advancing our industry.

Be the definitive source for innovation and excellence in aerospace education and research.

We want industry leaders, government agencies and our peers in higher education to put Embry-Riddle at the top of their list of resources for aerospace education and research.

What is our vision for our future? We can sum it up in three statements:

Be the unquestioned global leader in aviation and aerospace higher education.

I would argue that we are. We can always get better, but the keyword is “unquestioned.”

VISION FOR THE FUTURE

- Be the unquestioned GLOBAL LEADER in aviation and aerospace higher education
- Have a reputation for PERSONAL ATTENTION to student success
- Be the DEFINITIVE SOURCE for innovation and excellence in aerospace education and research

STRATEGIC PLAN – GOALS

That is our vision, now how do we realize it?

Our Strategic Plan outlines five goals with specific action items that we update annually. We also define metrics to measure progress on an annual basis.
Our vision and these goals will guide everything we do, from budgeting, to how we reward people for merit, to how we recognize achievement.

We are committed to success in five areas: Enrollment Management; Student Success; Global Strategy; Research and Innovation; and Philanthropy and Alumni Engagement.

We use a simple designation of red light-yellow light-green light to indicate performance over the past year.

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**STRAIGHTIC PLAN – GOALS**

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**Goal 1: Enrollment Management**

For Goal 1, we defined eight Enrollment Management metrics. In our first year, six of the metrics earned green lights. We achieved or even far exceeded our metrics in those specific categories. The two yellow lights mean we have almost made our goals, but we need to push a little more.

At a time when many private schools are seeing declines in enrollment, we recorded an increase of 39 percent of students who applied to Embry-Riddle Aeronautical University across both residential campuses.

I think the experience families have when they visit our campus makes a positive impression. On a typical day when I look out my window, I see large numbers of visitors touring campus. Many of the Board’s recent investments in infrastructure catch their attention. However, you can find attractive buildings on campuses across the United States. Our people set us apart.

For example, I saw a large family trying to take a photo with the Wright Flyer and Student Union in the background. There must be 50,000 of these photos on the internet.

Seeing the family shuffling around trying to get everyone in the photo, one of our grounds workers put down his tools. He stepped in and took the photo so the whole family could line up in front of the Wright Flyer. That simple gesture is personal attention. I thought: That is what Embry-Riddle is all about.

There are so many simple, daily ways to make a personal connection. It could mean visiting a residence hall. Talking with students in the dining areas. Just saying hello. Make those exchanges a personal priority. That 39 percent application rate I mentioned resulted in about a 21 percent increase in the incoming first-year classes. That high percentage tells us something about how students see who we are and what we have to offer.

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**ENROLLMENT**

I want to commend the staff and faculty who have prepared us for record enrollment. They have been working since spring to make sure new students have a welcoming experience with class assignments, housing and orientation. Institutions that have our level of growth are initially overjoyed. Then reality sets in. They realize they did not plan ahead to take good care of their new students. That is not true of Embry-Riddle. Teams on both campuses have been thorough and conscientious in making our incoming classes feel welcome and ready to get to work.
We offer programs that demonstrate a high return on investment. A student who attends Embry-Riddle will probably have a choice of high-paying job offers. Or they will be well-prepared for graduate studies. We should be proud of our placement success rate— which is far higher than most institutions. Prospective students and their parents often ask me about success after graduation. My response is: Thank you for asking. Let me share the great placement statistics and all the opportunities that are available to Embry-Riddle graduates.

IFS stands for institutional financial support, or in other words, student aid. At many schools, spending on IFS is out of control. Not at Embry-Riddle. We have a highly skilled financial team led by our CFO, Dr. Randy Howard, who manages IFS strategically with impressive results for the institution.

Over the past few years, our Board has made a significant investment in infrastructure for both residential campuses. Those of us who work on the Daytona Beach Campus and at Worldwide Headquarters can see dramatic changes. Another example of a new facility is the residence hall that opened in Prescott last year. As you can see, it is a well-designed home base, just a short walk from classrooms, labs and meeting places on campus.

One of the areas we monitor closely is national demographics. Between 2017 and 2019, the projected number of students graduating from high school and going on to college has increased by a small amount. In the following two years, 2020 through 2021, we are going to see a slight decrease. We then expect to see a significant increase for three years, with 8 percent growth in the number of 18-year-olds.

The projection we have to pay attention to comes in 2026 to 2029. We expect a 14 percent decrease in the number of high school graduates. Our recruitment strategies have to help keep us ahead of this downturn. We are still the preferred choice for many students, but national demographics are a factor we monitor.
Goal 2: Student Success

Student Success is at the center of the graphic because it is our most important goal. The fact that Embry-Riddle puts “Students First” is a message we need to send to every visitor to our campus, prospective students, families and employers. I understand we get busy, but students are the priority.

We have invested the time and resources to serve students better and we have made measurable progress quickly. We are doing well in all areas except a slight shortfall in retention of our adult learning population at Worldwide. This is not an immediate concern. Now that we have solutions in place in other areas, we can focus on addressing that challenge. Overall, we are doing quite well.

STUDENT SUCCESS

Do you remember when the Transformers® toys became popular in the 1980s? One industry-relevant project at Prescott involves a quadcopter that transforms into an airplane in the air. Students who worked on this design now have their names on patentable technology. They worked with a major producer of helicopters on this capstone project. We have examples from all of our campuses. I chose this one because it illustrates how students can work side by side with professionals to develop a unique design in VTOL aircraft technology.

STUDENT SUCCESS

When I talk to people from government, industry and alumni, our world-class reputation leads the conversation. We are the place for education in aviation and aerospace. Our visibility to industry contributes to Student Success because it leads to internships, enrichment opportunities and, ultimately, employment. One of the ways we stand out to employers is by providing our students with industry-relevant experience. Our programs directly link to real-world problems. Relevant experience gives our students an edge. For those of you in the classroom or on curriculum committees, please keep that advantage in mind.

Relevant curriculum is critical. We serve a fast-paced industry with breakthrough technologies that force you to stay nimble. I want to thank faculty for remaining engaged with industry – through publishing and presentations and conversations with peers, industry advisory boards and recent graduates. That commitment ensures we remain responsive and that we stand out to potential students and their potential employers.
One of the Board’s investments on the Daytona Campus is ERNIE Central in the Mori Hosseini Student Union. ERNIE Central is the hub for all student services and it allows us to banish that obsolete phrase: the “Riddle RunAround.” Students have a single, centralized source for registration, adding and dropping courses and financial services. Thousands of students have visited ERNIE Central, and it is running smoothly and making a real difference in the lives of students.

We have also introduced ALEKS, a math placement program and a new advising process that embeds advisers in each of the colleges to work alongside faculty mentors. The goal is to start connecting with students on Day One. That first-year adjustment is significant in terms of retention, so the earlier we reach out to students, the better.

We also made significant investments in capital equipment. We purchased three Penguin-C drones for our UAS program and extended our partnerships with Textron and Diamond to replace and expand our fleet. These are significant, high-cost items, but they position us to attract top students and faculty.

We also invest in our teaching and research laboratories, such as our wind tunnel. The wind tunnel attracts researchers, but it is also a resource for undergraduates in laboratory courses. In the slide, you see an undergraduate calibrating a highly accurate particle imaging system to map the flow fields around objects placed in the tunnel’s test section. When I was an undergraduate engineering student, I never had access to such high-precision, research-grade equipment.

The wind tunnel represents significant support from our Board and the State of Florida, which provided funding because we integrate teaching and research in this lab. Our cybersecurity labs also provide highly specialized environments for students to gain discovery-driven education.

Over the past year, we invested in student recognition. We saw students from other universities win awards that could have gone to our students. In response to the Strategic Plan, we created a new office that delivers dedicated support to students competing for national awards. We have the talent; we just needed to support it.
For example, we have a Daytona Beach College of Aviation student who is a semifinalist in an international competition sponsored by USAIRE (a collection of global aerospace and defense companies). USAIRE chooses 10 essays on aerospace and aviation topics written by students from around the world. Winners go to the Paris Air Show, every other year. In the past year, Embry-Riddle students have also earned Goldwater Scholarships and competed for Fulbrights. We are pushing hard to get students recognized as the top 20 in the country in Aviation Week.

In conversations with industry leaders, we talk about the value of engineering and technical fields overall. The market is strong. They want our graduates, and they are prepared to pay them well. For an engineering student today, the average starting salary is around $70,000 (with multiple job offers). However, industry leaders tell me the new hires they want most have technical degrees with business enablers. That does not mean an MBA. It means business skills such as project management and accounting basics, which add value. In the U.S., a graduate with a technical degree and business enablers earns a starting salary as much as $14,000 higher, according to Glassdoor job search data.

Another opportunity to “skill up” is to add digital building blocks. Students who know how to make sense of terabytes of data and present that data also earn more. Their starting salaries go up about $16,000, again according to data collected by Glassdoor.

This data comes from a company that monitors tens of thousands of placements across the country. It reflects real salaries from people hired in engineering and technical fields.

If we give students opportunities to “skill up,” they will earn what they are worth and go farther, faster in their career than we can imagine. We owe it to our students to deliver what is going to add value as they enter the workforce. We can also encourage internships. On average, students with internships on their résumés earn a starting salary that is $9,600 higher.

**Provost Lon Moeller** is working with leadership across campuses to initiate virtual project teams, so we give students more industry-relevant experience. Business needs people who can work across geographies and disciplines. We can have students work in virtual teams based in Daytona Beach and Prescott … or Singapore. Our first trial will be a NASA design project involving Prescott and Daytona Beach students. I look forward to more virtual teams and projects that involve different disciplines, such as engineering and business. Again, we do this because feedback from our industry advisory boards tells us it adds value to our graduates.
Goal 3: Global Strategy

We are a global institution. We have “2+” campuses – Daytona Beach, Prescott, and Singapore (with about 600 students.) We are in 33 different states thanks to our Worldwide Campus. We are in nine countries. We have a global presence, so we need a global strategy.

We have outstanding online programs. My congratulations to the Worldwide faculty and staff. According to *U.S. News & World Report*, Embry-Riddle is Number 1 in online bachelor’s degree programs. It is nice to be able to say that. Our marketing campaign gets the message across that we are the best, with a high-tech twist. There is nothing wrong with saying we deliver the top-ranked online degree program. We should be proud of it, and we should continue to put that message out there.

Goal 4: Research & Innovation

We are doing well in research and innovation. Areas that still require our focus relate to external funding levels. We are not as competitive as we could be in this area.
In the last five or six years, we have received $60 million in state grants, which allowed us to upgrade research resources. It brought us the MicaPlex, the wind tunnel and the aviation research hangar. Now it is our responsibility to demonstrate that we advance the industry and strengthen the workforce using these resources.

In the coming months, you will see the research hangar near the MicaPlex open for business. It is already at full occupancy. You will continue to see growth there. We are gaining recognition for applied research. We are staying focused in defined “cluster” areas. As we look at hiring and investments, we are going to be focusing our resources on those clusters.

Aviation cybersecurity is another key opportunity for us. This area is growing, and we are establishing ourselves as the leaders. New threats continue to emerge. Just recently, the FAA issued an alert for hacking risks to small planes. We are not talking about 787s. We are talking about general aviation aircraft similar to planes parked on our ramp.

Fortunately, Embry-Riddle has an NSF grant focused on cybersecurity for unmanned aerial vehicles. Both cyber and UAS are growing areas, and we will be part of future solutions.

Autonomous systems (UAS, UAV) is a growth area for both the military and civil markets. Our students can expect a wealth of job opportunities.

Simulation-based training is another emerging area in which we have the opportunity to lead. How do you prepare people to function in complex environments? How do we address complex human factors issues? Our instructor pilots are already thinking about how we prepare for single-pilot operations. If there was ever a school to tackle these challenges, it is Embry-Riddle. We have experience in the air, experience with simulators and people who understand human interface with an aircraft and with a simulator.

We compete in research areas that are receiving a lot of attention. One example is aviation data analytics. In the last week, I met with executives from two airlines. In both conversations, the topic of aviation data analytics came up in the first 15 minutes. These companies want our graduates. They want interns. They have open positions. They want people who understand data and how it applies to the aviation world. We are pushing hard in that area.

Workforce development is also a major issue. In the State of Texas, Governor Greg Abbott announced $5.2 million in grants. Embry-Riddle was at the top of this list, receiving 10 percent of the total grant. This $500,000 win is the work of our Worldwide colleagues. This does not happen by accident. It takes hard work. In this case, someone even got on a plane to deliver the proposal on time. Sometimes it pays to take risks. This grant award is a good example of how we are on the lookout for competitive opportunities.
Because of our success at the MicaPlex, we are expanding our research space. We will be part of Space Square (off Williamson and International Speedway Boulevard, near our Daytona Beach Campus.) This adds 12,000 square feet dedicated to space-related research and development. As an integral part of this new research center, we are helping to create an aerospace cluster in Daytona Beach that will support commercial space efforts. Thank you to all the people who worked hard to make this happen.

Our FAA NextGen Testbed is a unique research facility that will help ensure safe, efficient air traffic management in the National Air Space. The FAA is confident in what we are doing at NextGen. As a statement of our value, we recently received a five-year extension with up to $63 million in task orders. I view this as an incredible opportunity to engage faculty and students. An Embry-Riddle graduate student interested in air traffic management, new hardware or new software can do much more than write a thesis – they can work on task orders from the FAA. There is no other laboratory in the world where students can get the experience they can get at the Florida NextGen Test Bed. Promote this opportunity with students.

Research and innovation is not all about labs and equipment. It requires human ingenuity. We have two National Science Foundation Early Career Development honorees this year, Dr. Kshitja Deshpande and Dr. Ali Tamijani. They each won highly competitive awards at a national level, competing against the best and brightest. Their selection not only brings national attention to them and the university, they bring in research funding.
Creating strong relationships with government and corporate leaders is critically important to us. Over the past year, we established a single point of contact for government and corporate relations. We are reaching out to aerospace and aviation leaders so they see Embry-Riddle as a partner. Our goal is to get them on campus. We want them to meet faculty, see the campus and tour our laboratories. At that point, it is autopilot – things start happening. They see quality in everything we do. I deliberately walk them through the Flight Operations building. I have had executives from the highest levels with airlines tell me, “Don’t show this to my pilots, they’ll get jealous.”

We also reach out to policymakers. Secretary of Transportation Elaine Chao got a two-hour tour of Embry-Riddle and was clearly impressed. We have hosted visits from the Department of Defense and Department of Energy on campus.

Faculty and staff are encouraged to share contacts. Familiarity advances our reputation.

**Goal 5: Philanthropy and Alumni Relations**

In the area of philanthropy, we had a record year, receiving our two largest gifts in Embry-Riddle history. We raised $26 million against a goal of $12 million. I have challenged Marc Archambault and his team to bring in the two largest gifts again next year so I can use the same slide during my next address.

Many of you got the chance to meet our benefactor, Dr. Helen Wessel. Dr. Tim Brady and Dean Karen Gaines had long-term relationships with her that strengthened her affiliation. I learned from the Chairman that Helen Wessel was involved early in the planning for the Daytona Beach Campus. We lost her earlier this year. She had a wonderful life, and part of that was her engagement with us. Her love for Embry-Riddle translated into a legacy. Through her estate, she created an endowment that supports young women studying aerospace physiology. Thanks to her gift, we can support a limited-enrollment, high-quality program moving forward.
Our efforts to increase corporate support for our students have been successful. We have expanded our involvement through programs such as the Boeing Scholars at Embry-Riddle. While we worked hard to build a strong case for their support, a key factor was the performance of our graduates over many years at Boeing. Out of this effort came an endowed scholarship. There are 22 scholars, half on the Daytona Beach Campus and half on the Prescott Campus.

These photos represent selfies our Boeing Scholars at Embry-Riddle took when they found out about their award. They sent us their photos within 48 hours. This program is a great example of how corporations can step up and support a pipeline of much-needed STEM talent. In this case, the scholarship increases the involvement of women, veterans and underrepresented minorities in aviation and aviation maintenance, which helps diversify the industry.

We are also grateful for the generous support for the College of Business from Karen and David O'Maley.

I also want to acknowledge our successful Faculty and Staff Giving campaign. Several units had 100 percent participation. This was a record year for participation. That is a powerful statement for how much we believe in ourselves.

Embry-Riddle is about to embark on a major campaign to raise new funds in support of our vision for the future. Our starting point is $100 million, and I would like to see that number go up every time we revisit the campaign. We have established campaign goals for academic excellence and interdisciplinary institutes of excellence and student success. Notice these areas reflect the goals in our Strategic Plan and the connection between our goals and our campaign priorities.

We have also had strong support from Delta Air Lines, through the Delta Propel accelerated career path program, and from other airlines. We will only see this grow because we are the “go-to” place for top aviation and aerospace graduates.
Chairman Hosseini mentioned how important this institution is to the Daytona Beach area. We arrived in April of 1965. In this photo from that move, you can see what looks like an aircraft fluids lab on the back of a VW van. There is a sign taped on the truck from a local business reading: The Jaycees Moving Embry-Riddle to the Daytona Beach Area. A group in town, the Committee of 100, was committed to building up the business climate in the community. Trustee Emeritus Phil Elliott, who is with us here today, was a part of that group.

I also want to acknowledge long-term, former Trustee Jay Adams, who was also part of that group. He served on our Board for 41 years and worked with every president of this university.

Our first president, Jack Hunt, approached community leaders with the opportunity to bring the school here. The relocation happened over a weekend. Volunteers drove to Miami and moved Embry-Riddle to Daytona Beach. You can imagine that today if we wanted to move Embry-Riddle, it would take a lot more than 100 pick-up trucks and a few minivans. I look at this as an example of individuals who had a vision for the future. What is our vision for the future?

It took 55 years to get to where we are today. It took the Board, faculty and staff to make it all happen. People worked hard to move us forward. In 2019, we are proud to be part of a place that matters. Embry-Riddle is contributing something important to its students and the industries we serve. We are doing exceptionally well. We have built a powerhouse. We owe it to the visionaries I just mentioned to keep thinking about how we can improve as we go forward.

The take-away messages go back to how you can support our threefold vision.

- **RAISE** the standard. We set the standard for aerospace education. Together we can raise that standard.
- **REMEMBER** … We are here for students. Show them they matter. They will remember you.
- **YOUR DRIVE** for innovation makes us leaders – and inspires future leaders. Don’t let up.

It takes the efforts of all of us to create the success of this institution. The work you do makes my life so enjoyable. I know everyone in this room has the same passion for this institution. Thank you for all that you do.