

Mar 17, 2017

Dr. Jim Henderson
President, University of Louisiana System
1201 North Third Street, Suite 7-300
Baton Rouge, LA 70802

Dear President Henderson

Thank you for considering my application to become the President of the Northwestern State University. I am excited about an opportunity to lead a University steeped in student centered academic excellence whether delivered through traditional or electronic delivery methods. The chance to be part of the next phase of the NSU's growth and innovative expansion along with the commercial and population of the southwest region of Louisiana is very appealing

During my higher-education career, I have been privileged to serve in numerous leadership and educational roles that uniquely qualify me to serve as Northwestern's President. I have amassed extensive educational experience in higher-education, two-year college feeder systems, K-12 and non-profit organizations. I have led both civilian and military organizations stateside and in combat zones. At the Air Force Academy, my duties as Commander of the 94th Flying Training Squadron, as a Research Director, as a Permanent Professor, as Department Head and Dean, and as Vice Provost, as well as the AF Space and Cyber Command Acting Chief Scientist, prepared me well for Dean of Engineering and Applied Science duties at Arkansas Tech University. I believed it was important to gain civilian administrative experience. I am now well prepared for the responsibilities required of the more demanding and welcomed duties as Northwestern State University's President.

As a two-time Dean, as a Commander in Kuwait, as the Mayor of the Green Zone (International Zone) in Baghdad during the height of the Iraqi War with over 10,000 Coalition contractors and Iraqi civilians looking to my leadership for their support and safety, as the Vice President of the American Institute of Aeronautics and Astronautics for Education and while serving on a local K-12 Board of Education, I have displayed and developed the leadership characteristics the Demons seek in working with internal and external constituencies as well as peer educational and support organizations on its path to institutional excellence.

Please find attached three documents: Resume, Qualifications and Leadership Qualifications. My resume addresses the experience and qualifications required in the Position Specification. The Qualifications attachment addresses the characteristics called for in the job advertisement and the Leadership Characteristics further address the characteristics called for to serve as a successful Northwestern President.

Thank you for your consideration. I look forward to becoming part of the Demon Team and helping the University that has made a difference in the lives of generations thrive as a regional leader in research, leadership, professional training and higher-education in a diverse and multi-cultural welcoming environment.

Respectfully,



Dr Neal Barlow, BGen USAF (ret)
Dean

3 Attachments

1. Resume
2. Professional Qualifications
3. Leadership Characteristics
4. References

Dr. NEAL BARLOW

Dean, Chair, Vice Provost, Professor, Commander, Aviator and Acting Chief Scientist
Brig Gen USAF (ret)

Senior leader and educator. Teaching, research and administrative experience as **Dean of Engineering and Applied Sciences College.** Lead curriculum development, national-level program accreditation, budget, fund raising and strategic planning for 6 diverse departments and 28 majors at the Associate, Bachelor and Graduate levels. Oversee STEM Institute/Project Lead The Way State Affiliate Director providing STEM Outreach for Arkansas K-12 education. Serve on multiple national level Boards and Committees. ABET, Inc. Commissioner and Program Evaluator. As **Engineering Division Chair at the United States Air Force Academy (Dean of Engineering College equivalent)** led curriculum development, national-level program accreditation, budget and strategic planning for the 5-department, 10 major, engineering division as well as oversight of 6 research centers. Led the first major effort in two decades to understand and plan for needed building, commons and laboratory requirements. As the **Vice Dean of the Faculty (Vice Provost)**, supported the Dean (Provost) in leading a 700-member faculty in 4 Divisions (Colleges), 19 academic departments and 5 staff agencies while directly supervising the Budget Officer, Director of Education, Director of Library, and the Registrar. **Acting Chief Scientist** for the US Air Force's **Space and Cyber Command** advising the Commander on technical and scientific matters. **Permanent Professor and Department Head** of the largest engineering department at the United States Air Force Academy (USAFA) to include oversight of faculty development, curriculum development and accreditation, budget, research, laboratory facilities, and strategic planning with additional leadership responsibilities as the **Head of the Aero Research, and Modeling & Simulation Research Centers** conducting DoD and NASA basic and applied research. Twice led comprehensive curriculum reviews for the University President resulting in major core curriculum transformations. Elected by 35,000+ membership of the American Institute of Aeronautics and Astronautics (AIAA) as the **Vice President of Education and to the Board of Directors** to oversee institute committee activities in K-12 STEM outreach, undergraduate and graduate college student awards, scholarships, & competition activities, professional member education activities, and academic activities focused on ABET accreditation for national and international aerospace undergraduate and graduate college programs while reporting to the Board on all education committee activities, strategic planning and budget matters. In 2012, elected as the **Director at Large on the AIAA Board.** Served seven years on the **Board of Education** for a local K-12 school district. During Air Force career, was entrusted with the command of a **flying squadron, support squadron, a base in Kuwait, and the International Zone (Green Zone) in Baghdad, Iraq. AIAA Fellow.**

EDUCATION (military leadership education on request)

| | | |
|-------------|---|----------------------|
| 2009 | Harvard Graduate School of Education Institute for Management and Leadership, Higher Education | Boston, MA |
| 1991 - 1994 | Arizona State University Doctor of Philosophy, Aerospace Engineering | Tempe, AZ |
| 1983 - 1984 | University of Washington Master of Science, Aeronautics and Astronautics Engineering | Seattle, WA |
| 1974 - 1978 | United States Air Force Academy Bachelor of Science, Aeronautical Engineering | Colorado Springs, CO |

WORK EXPERIENCE

- 2015-Present Arkansas Tech University, Dr M Abdelrahman (VP Academic Affairs)

Dean, College of Engineering and Applied Sciences – Leads College of Engineering and Applied Sciences providing high-quality accredited Associate, Bachelor of Science and Masters of Science degree programs. College provides high-impact opportunities preparing approximately 1600 students for their chosen profession and a fundamental broad-based curriculum as educated citizens with an aspiration for life-long learning. Leads curriculum development, national-level program accreditation, budget, fund raising and strategic planning for 6 diverse departments (Electrical Engineering, Mechanical Engineering, Computer and Information Science, Agriculture, Emergency Management and Parks, Recreation Administration & Hospitality Administration) with 28 majors at the Associate, Bachelor and Master levels. Oversees STEM Institute/Project Lead The Way State Affiliate Director who provides STEM Outreach for thousands Arkansas K-12 teachers and students. Serve on Institution Level Committees as Assigned by the Provost and President.

2013 - 2016, Director at Large, AIAA Board of Directors – Elected by 35,000+ membership to oversee all Institute activities to include: strategic planning, mission, budget, personnel, and conference planning.

2015 - Present, ABET Commissioner and Team Chair, Engineering Accreditation Commission representative

2007 - Present, ABET Program Evaluator, AIAA sponsor, Aerospace programs, 16 visits

2006 - Present, Member AIAA Finance Committee, Academic Affairs Committee, & Student Activities Committee

2014-2015 United States Air Force Academy, CO, Brig Gen Andy Armacost

Associate Dean (Assoc Provost) for the Core Curriculum; Permanent Professor & Head, Dept of Aeronautics As Associate Dean directed a 50-year curriculum review and redesign responsible for proposing the most sweeping changes in the Academy's 100+ hour core curriculum to best prepare graduates to meet Air Force and National needs in line with the Strategic Plan. As Department Head, directed a 50+ member department operating 3 research centers (\$5M+) in support of the Academy's largest engineering program. Opening new Unmanned Aerial Vehicle Center with grant funding in 2015. Developed & serve on the oversight board for Academy's K-12 Outreach Center.

2008- 2015, Academy School District 20 Board of Education (K-12) - Liaison Appointed by USAFA Superintendent in 2008 to fill District Charter position on Board of Education: represented military families on all issues that came before the bimonthly Board meetings, advised Board on all issues before it including curriculum, budget, logistics and personnel.

2013 - 2014 US Air Force Space Command, CO, Gen William L Shelton

Acting Chief Scientist, Air Force Space and Cyberspace. Served as the primary adviser to the commander on all scientific and technical matters concerning space and cyberspace research and development programs. Represent Space Command on science and technology decisions, high-level planning, and policy throughout the U.S. government, industry, academia, the international community, and other scientific and technology organizations at venues that affect the command. Served on the DoD and Air Force Space Test Program Boards determining the priorities for support and spending from DoD and the Air Force. (15 month assignment)

2000 – 2013 United States Air Force Academy, CO, Brig Gen Dana Born

2008 - 2013 Chair (Dean), Engineering Division, and Permanent Professor and Head, Department of Aeronautics

As Engineering Division Chair (Dean of the College of Engineering equivalent), led curriculum development, national-level program accreditation, and strategic planning for the five-department Engineering Division. Oversaw personnel hiring and professional development along with budget planning and execution (200+ faculty and staff). Oversight includes 6 Research Centers and the associated diverse engineering and education activities. Headed a 50-year curriculum review that promises to make the most sweeping changes in the Academy's 100+ hour core curriculum to best prepare graduates to meet Air Force and National needs. Voting Member of Academy Board, USAFA's most senior governing board. Developed and received Charter for the Academy's new K-12 STEM Outreach Center.

2008 - 2013 Vice President of Education for the American Institute of Aeronautics and Astronautics (AIAA) -Elected by membership to Board to oversee Institute committee activities in K-12 STEM outreach, undergraduate and graduate college student award, scholarship, and competition activities, professional member education activities, and academic activities focused on ABET accreditation for national and international aerospace college programs.

2006 - 2008 Vice Dean of the Faculty, (Vice Provost equivalent) Led and managed the 700-member Dean of the Faculty mission element in the Dean's (Provost equivalent) absence. Responsible for daily operation of 19 academic departments, 5 staff agencies, a \$7.3M operating budget and a \$300M facility. Directly supervised the Budget Officer, Director of Education, Director of Library, and the USAFA Registrar. Chaired, Superintendent's Preparatory School Advisory Committee and Officer Representative for the Football Team.

2004 - 2005 Commander (Director), Joint Area Support Group, Multi-National Forces-Iraq, US Embassy Baghdad, Iraq - Directed the activities of Army, Air Force, Navy, Marine and Coalition Contractor Personnel along with DoD and Iraqi Civilian Personnel in direct support of the US Embassy in Baghdad and the Commander Coalition Forces Iraq. Supported operations in a combat zone for 3000+ US State and DoD Personnel assigned to the US Embassy Compound in Baghdad. As the Mayor of the International Zone (Green Zone), oversaw the Security, Public Works and Property Management of the Iraqi Government national zone which includes the offices and living area of the Interim Iraqi Government, 11 Embassies, the 3rd Brigade Combat Team, a Contingency Army Support Hospital, Iraqi Management Contract Office, the Iraqi Convention Complex and Hotel, and numerous prime and sub-contractors, along with Iraqi Residents totaling over 30,000 inhabitants. Managed an annual budget of \$110M and contracts worth over \$400M. **2000 –**

2004 Permanent Professor and Head, Department of Aeronautics, responsible for the command and leadership of USAFA's largest engineering department: 42 personnel, \$.5M budget, \$60M lab assets. Included oversight of curriculum development, personnel, budget, research, laboratory facilities, and strategic planning. Responsible for continued development and execution of university-level accredited aeronautical engineering education program. Directed fluid and thermal sciences portion of accredited mechanical engineering education program. Head of the Aeronautics Research Center and chartered new Modeling and Simulation Center that together conduct over \$3 Million of annually funded and in-kind DoD and NASA basic and applied research. Garnered USN&WR's #2 National ranking.

2000 - 2004 Chair Student Activities Committee, AIAA, oversaw college level programs including conferences, awards, and membership. Secured a \$100k+ grant from the AIAA institutes developmental committee to change the structure of student programs; doubled student attendance and competition teams at seven regional competitions, established Australia and Asian Basin regional competition and initiated VTC involvement by students in dispersed geographical regions. Increased student membership by an unprecedented 4% per year for four years, only segment of Institute to show growth.

1999 - 2000 Deputy Commander, 34th Operations Group

Directed, formulated, and controlled training operations of two flying squadrons and an operational support squadron. Generated 60,000 soaring and 15,000 parachuting sorties, utilizing 101 aircraft and 300 instructor pilots/jumpmasters to support a student load of 2,800 cadets. Oversaw a \$3.5M maintenance contract. Instructor & evaluator TG-7 & T-41.

1998 - 1999 Commander, 94th Flying Training Squadron

Led 300 officers, cadets and civilian personnel conducting 50,000 sorties annually in glider and powered aircraft. Directed, formulated, and controlled operational flight training operating a fleet of 39 aircraft of 7 different types. Lead National Intercollegiate Flying Association Cadet Competition Team. Maintained dual instructor qualification in TG-7 and T-41s.

1997 Commander, 4417th Support Sqdrn, Ali Al Salem Air Base, Kuwait

Led squadron and US-Site for airmen at the most forward-based Air Force site in the Joint Task Force Southwest Asia Area of Responsibility. Command responsibilities included security forces, civil engineering, education, services, logistics, medical, contracting, and finance functions.

1994 - 1997 United States Air Force Academy, Colorado Springs, CO

1996 - 1997, Associate Professor of Aeronautics, Director of Resources, Propulsion Sequence Director - Supervised all Department of Aeronautics financial resources, Discipline Director for propulsion curriculum, course director for both seniorlevel propulsion courses, lead instructor and course developer of an experimental, problem based, Introduction to Engineering course for freshmen. Academic Advisor. Mentor for two cadet squadron commanders. T-3A Instructor Pilot.
1994 - 1996 Assistant Professor of Aeronautics, Division Chief, Director of Research, Director of Resources - Supervised Department of Aeronautics research, supervised four professors, one NCO, and two civilians. Discipline Director for propulsion curriculum, Academic Advisor for students majoring in Aeronautical Engineering, T-3A IP.

1991 - 1994 Graduate Student, Arizona State University Tempe, AZ

PhD Student (AFIT Liaison Officer), completed PhD in Aerospace Engineering. Dissertation, "The Effect of Surface Roughness and Local Film Cooling Effectiveness and Heat Transfer Coefficients," was conducted in response to an Air Force need to understand life cycle problems with the Pratt and Whitney F-100 engine. Liaison Officer for 35 officers.

1988 - 1991 Randolph AFB, San Antonio, TX, Maj Gen Sam W Westbrook

1990-1991, T-38 Command Flight Examiner, HQ Air Training Command (ATC), established command standardization and evaluation requirements. Provided guidance and conducted evaluations for the ATC Commander in the following programs: Pilot, Navigator, Helicopter, and Space Training; Instructor Training; Euro-NATO Jet Training; Crew Survival.

1988-1990, Instructional Program Developer, 3305th School Squadron, HQ ATC, responsible for the Aerodynamics courses taken by all Undergraduate Pilot Training (UPT) students and instructor pilots. Co-Author of new aerodynamics text and workbook, Author of new instructor guide for UPT aeronautics instructors. Pilot Instructor Training IP (T-38).

- **1985 - 1988 Assistant Prof of Aeronautics, United States Air Force Academy, Colorado Springs, CO** Department of Aeronautics, Lead Professor for the Propulsion track of the Aeronautics major. Executive Officer for the Department of

Aeronautics' Department Head, Junior Officer of the Year, Recipient of the William P. Clements Award as an Outstanding Military Educator, Assistant Air Officer Commanding of Cadet Squadron 02, T-41 Instructor Pilot.

1983 – 1984 Graduate Student, University of Washington, Seattle, WA

Graduate Student, Department of Aeronautics and Astronautics, MS earned in Aeronautical and Astronautical Engineering as an Order of Daedalian Fellow, one fellowship awarded to the Armed Forces each year for studies in aerospace engr.

1980 – 1983 T-38 Instructor Pilot, Williams AFB, Phoenix, AZ

T-38 Instructor Pilot, 97th Flying Training Squadron, trained and educated undergraduate pilot training students in Air Force's advanced trainer (T-38). 97FTS - Instructor Pilot of the Year, Chosen as "Outstanding Instructor" by students of four UPT classes. Flight Commander, Remote Supervisory Unit Controller, Supervisor of Flying.

▪ **1980 T-38 Pilot Instructor Training Student, Randolph AFB, San Antonio, TX**

560 Flying Training Squadron, Top Graduate Award.

▪ **1978 – 1979 Undergraduate Pilot Training student, Williams AFB, Phoenix, AZ**

Distinguished Graduate and Air Training Command Award.

AWARDS

1977 Aero Propulsion Laboratory Commander's Award
1978 Distinguished Graduate, USAF Academy
1978 Top Graduate in Thermodynamics and Propulsion, Class of 1978
1979 Distinguished Graduate - Air Force Undergraduate Pilot training
1980 Top Graduate from T-38 Pilot Instructor Training
1982 97FTS, Instructor Pilot of the Year
1983 Order of Daedalian Fellow, University of Washington
1986 Junior Officer of the Year, Department of Aeronautics, USAFA
1987 William P. Clements Award as an Outstanding Military Educator
1996 557FTS - Attached Instructor Pilot of the Quarter, Jul-Sep 96
2007 Dr Heiser Award Engr Div Finalist-Student nominated/selected
2008 Dr William Heiser Award Engineering Division Finalist
2013 Dr William Heiser Award Engineering Division Finalist
2013 American Institute of Aeronautics and Astrodynamic Fellow

MAJOR MILITARY DECORATIONS:

Legion of Merit
Bronze Star
Meritorious Service Medal with three oak leaf clusters
Air Force Commendation Medal
Armed Forces Expeditionary Medal

CIVILIAN AVIATION

ATP, CFII, Multi, single, Glider Pilot
Past owner of C-172, C-182RG

NEAL BARLOW, PhD
Dean, Chair, and Professor, Acting Chief Scientist

QUALIFICATIONS

As I exhibited during each leadership responsibility, I bring an enthusiastic spirit for the organization and mission that will help inspire the McNeese Faculty, Students, and Staff to new and greater successes in preparing graduates for greater individual, organizational, regional and national service. I look forward to the opportunity to help lead an excellent academic and leadership organization into the 21st century as the University reaches its goals of academic achievement, constant innovation and professional development to achieve academic excellence and success of its graduates in the work place by meeting the needs of students, business, government and industry both regionally and nationally.

Over the past 30+ years I have served in numerous leadership and educational roles allowing me to grow and exercise my professional qualifications. My professional growth began at the Academy where I was fortunate to serve as a commander and to lead my unit to 1978 Honor Squadron recognition. My growth continued during each of my numerous positions, all of which contained a dimension of leadership, education and always responsibility. Fortunately, my leadership always chose to look for ways for me to grow. In turn, I developed into a transformational leader who also looks constantly for ways for the people in my organization to grow in their professional qualifications and responsibilities. Most recently, Arkansas Tech University hired me to be a change-agent for a college that had grown used to the past and was failing to look forward at the possibilities. For some it has been a painful change, but for most it has been renewing. Both my department heads and a majority of the faculty are energized about new curriculum, new programs and new graduate degrees. We have transformed a teaching undergraduate college into a growing undergraduate/graduate mix with research at the center of the graduate programs and playing an increased role in undergraduate education. It has been most transforming for my department heads, who I believe will never return to their management and leadership methods of the past.

In 2013 the 4-Star Commander of AF Space and Cyber Command, hired me to serve as his Chief Scientist while he went through the process of hiring a permanent civilian Chief Scientist. During that 15 months, I had the opportunity to grow, learn about Space operationally and technically while interacting with the most senior command leadership of the Air Force as well as the senior technical experts in and outside the DoD. While I enjoyed greatly being in a position to directly influence the Air Force technical road map and was encouraged to apply for the permanent Chief Scientist position, my heart was and remains in Higher Education. For 40 years I was fortunate to be part of our great Air Force, where people were professionals ready for any challenge. You will find that my experiences translate well to the challenges you have outlined in the required and desired qualifications. As indicated in my resume, I meet the qualifications to serve as the President of McNeese University and below outline experiences that address those qualifications further.

As a Commander/Chair/2x Dean/Vice Provost/Director of numerous organizations, I have led these organizations, overseen numerous efforts to develop long-range strategic plans, implemented those efforts and, finally, assessed success of these efforts and understood effectiveness in meeting organizational goals and in meeting constituencies' needs.

- a. 2015-2017 Dean, College of Engineering and Applied Sciences, Arkansas Tech University
 - 1) Transformed teaching programs into research based undergrad/graduate programs
 - 2) Stood up Research Center to provide synergy and grant help for young faculty
 - 3) Stood up and oversee Faculty Committees to deal with important College transformational issues
 - a. Established outcomes for all programs regardless of outside accreditation
 - b. Assoc Dean helping each program develop formal accreditation efforts
 - c. Much more!
 - 4) Garnered 4 new faculty lines for ailing engineering programs
 - 5) Secured Pay increases for professors in areas where quality was affecting student education
 - 6) Established Assoc Dean position and restructured college to provide better leadership to diverse programs
 - 7) Established new student tutoring requirements for a diverse first generation/international/low academic composite cohort of student body which is paying dividends in recruiting and retention.

- 8) Have hired new faculty in almost every program to improve quality of education and research efforts
 - 9) Worked with our 2-year Ozark campus Chancellor to ensure transportability of course work to our 4-year programs; students must be able to graduate in 4 years total from our 2 + 2 programs, achievement rates up!
- b. 1994-2000 Region V, Deputy Director for Education and Appointed Member, Student Activities Committee, AIAA
- 1) Helped develop roadmap and structure for a new AIAA Foundation (nonprofit) to raise funding and provide oversight for institute education programs
 - 2) Secured a \$100k+ grant from the AIAA institutes developmental committee to change the structure of student programs; doubled student attendance and competition teams at seven regional competitions
 - 3) Established Australia and the Asian Basin regional completion and initiated VTC involvement by students in dispersed geographical regions.
 - 4) Increased student membership an unprecedented 4% /year for 4 years; only segment of Institute to show growth
- c. 1997-1998 Commander, 4417th Support Squadron, Ali Al Salem Air Base, Kuwait;
Site (US Base) Commander, Ali Al Salem
- 1) Restored Ali Al Salem's operational capability for Kuwait following nearly total destruction during Iraqi attacks and occupation and follow-on joint liberation operations
 - 2) Developed strategic plan for long term US base use and operations
 - 3) Enabled Kuwait to serve as a gateway into Middle East for troops and supplies
- d. 1998-1999 Commander, 94th Flying Training Squadron, USAF Academy, CO
- 1) Selected by Wing Commander to command aircraft incident plagued unit-reduced incident rates to zero while achieving highest cadet solo rates in history after three years of multiple aircraft accidents
 - 2) Developed, received funding for & implemented strategic plan including new hanger & associated operations
 - 3) Tremendous Cadet Flying Team success at Regional and National Competitions (2nd Place Nationally, highest in USAFA history then and since)
- e. 1999-2000 Deputy Commander, 34th Operations Group, USAF Academy, CO
- 1) Served as Deployed Group Commander for numerous operations
 - 2) Developed strategic plan and gained financial support for new USAFA Airfield tower
 - 3) Developed new tower & associated airfield operations plan critical to continued safety of flight (Built in 2001)
- f. 2000-2004 & 2008-2013 Professor and Head, Department of Aeronautics, USAF Academy, CO
- 1) 2002, 2008 and 2014 ABET Accreditations with no deficiencies or weaknesses at any level! First Accreditation report (Curriculum strategic plan) and visit under ABET 2000 Criterion.
- g. 2004-2005 Commander, Joint Area Support Group & Mayor of the Green Zone Baghdad, Iraq
- 1) After observing my service as the Coalition Liaison to the United Nations Ambassador to Iraq Ambassador Negroponte and Gen Casey handpicked me to replace a Marine Brigadier General (select) as Commander of the Joint Area Support Group-Central (Wing Commander of the Green Zone)
 - 2) Commanded Marine, Army, Navy, Air Force, civilian, and contractor organizations, fulfilling all duties of a small city plus oversight of security operations in a combat zone
 - 3) Worked with Iraqi Prime Minister, President, Parliament and Secretary of State to provide a safe and functioning Iraqi government, while slowly transitioning logistical, budgetary and security concerns to the Iraqis
 - 4) Following two suicide bombings that killed over 40 coalition members and Iraqis soon after taking command, I designed a security system that prevented any further improvised explosive devises (IEDs) or vehicle born IEDs (VBIEDs) in the International Zone until the time the Zone was handed back to the Iraqis.
 - 5) Hired engineering firm (Colorado Springs based) and began the process of developing a Strategic Plan for the Iraqi Government Zone; result accepted by Iraqi Parliament as road map for government buildings and offices. Oversaw \$100M+ construction contracts and projects.
- h. 2006-2008 Vice Dean of the Faculty (Vice Proost), USAF Academy CO 1) Served as Acting Dean (Provost) during Provost's six-week Capstone TDY
- 2) Led numerous inter-mission working groups on strategic planning, cadet workload, time, calendar and schedule of calls, and worked with USAFA Personnel and Plans offices along with Air Force Personnel

office in writing AFI 363501 to ensure proper governance of the academic mission to include Permanent Professors & establishment of the Senior Military Faculty Program

- 3) Represented DF at many external speaking functions
 - 4) Graduate, Institute for Management and Leadership, Harvard Graduate School of Education
- i. 2009-2013 Permanent Professor and Chair, Engineering Division, USAF Academy, CO
- 1) Organized ABET evaluation & assessment efforts to be effective, consistent among prgms
 - 2) Developed awards program and ceremonies to honor quarterly and annual award winners
 - 3) Developed budget system common to all engineering programs to be effective in garnering institutional and Academy Foundation support
 - 4) Initiated FACTS 2030, a study of required engineering space and laboratory requirements. Currently the budget need is the Superintendent's top financial priority.

As the Dean, I've emphasized three overarching themes to improve the quality of educational programs: 1) focus on constituencies' needs (graduating outstanding professionals), 2) adding new methods and technologies to better develop solutions and to better prepare our graduates for service; and, 3) ensuring our accreditation and evaluation processes exceed criteria. The results are taking hold at Arkansas Tech and elevated the student educational experience to new heights and sky-rocketed the reputation of Engineering and USAFA as a premier institution for research and educational excellence in aerospace and engineering. The quality of USAFA's core and majors' courses and success in actively engaged cadet learning is reflected in the growth of its research centers and through outstanding external validation. The result in turn allowed us to be very successful in fundraising to support educational programs. At all times, whether at Arkansas Tech, USAFA, or on the basketball court, I foster an atmosphere of trust and high expectations that enables others in my organizations to be innovative and successful.

- a. In 2012, in response to discussions with our Provost and the 20+ Department Heads, I initiated a Dean level effort to evaluate our core curriculum and to recommend a way forward to insure our curriculum meets both the needs of accreditation and, most importantly, our constituency. That effort was key in deterring an external effort by well-meaning but wrong minded faculty who wanted to force a quick change to the curriculum. The new Provost asked me to resume the effort after my return from Space Command. I left the Dean position my last year at USAFA to a colleague, focusing on my responsibilities as an Associate Provost and the core curriculum (general education).
- b. In 2002 (as the Department Head since 2000), the aerospace engineering program at USAFA had been continually recognized by *US News and World Report* as the second-ranked undergraduate program in the country for institutions without PhD programs. You'll note that before I left and now it is ranked #1.
- c. *Aeronautics Research Center (ARC)*. Under my leadership, funding grew from \$200K in 2000 to \$3M in 2012 while serving our AF, DoD and NASA customers. In-Kind support for efforts including our high-speed computing needs was even larger. Projects served customers from the Orion program to the Next Advance Tactical Fighter Drone program. Every undergraduate aero student at the Academy accomplishes a piece of real world problem solving for real customers.
- d. USAFA cadets since 2000 have won three times as many American Institute of Aeronautics and Astronautics Regional and International Student Conference championships than any other school, nationally or internationally. Under my leadership the Academy has the world's best undergraduate aeronautical engineering program! My vision to have every cadet involved in real customer research paid off for students and the institution.
- e. *Modeling and Simulation Research Center (M&SRC)*. I launched the M&SRC in 2001 after the Secretary of the Air Force expressed a desire for 2nd Lieutenants to have more science, technology and modeling background. The annual budget of over \$1M (+\$3M+ in DoD computer time) leverages research conducted in the Institute for Information Technology Application, Space Physics and Atmospheric Research Center, Center for Aerospace Structural Life Extension and Center of Innovation and yields over 20 conference and refereed journal papers per year, including an average of four student papers at professional conferences. As examples, in 2003, M&SRC was awarded the AF Science and Engineering Award for CV-22 and Predator advancements, and, in 2008, the Deputy Center Director, Dr. Russ Cummings, earned the Frank J Seiler Research Award for Engineering.
- f. The Provost asked me, as a young Department Head, to lead a curriculum review and core curriculum development team of other Department and Agency Heads. The result was a major change in the core curriculum (both hours and requirements) that has stood with only minor changes for the past decade. The effort included briefings to the Board and Board of Visitors (Board of Regents) prior to final approval and implementation.

- g. *Aircraft Design sequence*. In 2000, the aircraft design sequence at USAFA received little external funding and customer involvement. When I left the Aero program alone received over \$350K annually in support of cadet design course efforts and direct involvement by the Pratt and Whitney, Boeing, Air Force Research Laboratory and the Office of the Secretary of Defense, Director of Test and Evaluation.
- h. *National Excellence*. In 2002, the aeronautics program was awarded the National Aeronautic Association's Cliff Henderson Award. The award is presented to a living individual, group of individuals or organization whose vision, leadership or skill made a significant and lasting contribution to the promotion and advancement of aviation or space activity. I leveraged both my engineering programs and the Academy's flying programs to form the winning award package submission. Aeronautics program ranked #2 nationally by USN&WR for undergraduate only schools.
- i. *K-12 STEM Outreach Center*. With the help of the Director of Research and the Provost, I founded the Center in 2009. The Center now brings in almost \$300K of external support and impacts several hundred teachers and thousands of students annually.
- j. *Initial Flight Training (IFT) program*. On behalf of the USAFA Superintendent, I developed the curriculum to permit the stand-up of powered flight at USAFA following a three-year stoppage due to three T-3 accidents. I presented numerous briefings to Colorado Springs municipal and community groups. As a result, the Academy received clearance from an environmental impact study and the support of the community in standing the powered flight program back up.
- k. Named Selection Authority by the Superintendent for the Introductory Flight Training contract to determine aircraft, maintenance, and instructor requirements and select the final contractor for the program.
- l. In 2003, following a tow plane crash and loss of life, I led a Command Directed Investigation (Graduate of the AF Safety Board President's Course at Kirtland AFB) that resulted in over 40 changes in the Academy's soaring program. Since then, there has been no loss of life in the Academy's soaring program.
- m. *Systems Engineering*. I've played a key leadership role in establishing our Systems Engineering major in response to a need identified by AFMC and AF leadership. I first directed and shepherded the development of a freshman-level core course to introduce USAFA cadets to engineering and systems thinking, and then assumed oversight of the systems engineering program, bringing its administration under the Aeronautics Department in 2005 and then the Engineering Division in 2008. Our efforts resulted in a very rare maximum six-year ABET accreditation on our first try in 2008. As of 2014, our SE program is the largest engineering program at USAFA.
- n. *Promotions*. With the encouragement of my leadership, during my tenure I've promoted more officers to Colonel than any other Department Head.
- o. *Top Student Critiques*. Personally always ranking at or very near the top in course, department and DF-wide cadet critiques, I was a Dr William Heiser Award Engineering Division Finalist for cadet-nominated Annual Instructor Award in 2007, 2008 and 2013.
- p. *Cadet Summer Research Program (CSRP)*. Since I became the Aero Department Head, the aero program has had more aero cadets funded annually by external agencies than USAFA cadets in any other major - \$1M+ in external support; the Engineering Division accounts for ¾ of cadets.
- q. *Cadet Scholarships*. The Aero Department has more annual graduate school scholarships than any other USAFA program; the Engineering Division receives 2/3 of all scholarships received by USAFA.
- r. *Vice President Education and Board Member, AIAA*. Elected by AIAA membership to oversee college level programs, accreditation programs, and K-12 outreach activities. Awarded \$250k grant from AIAA Foundation to establish Educator Academy and new student workshops to improve outreach activities, key factors in continued growth of student membership and growth of K-12 teacher membership. Developed Memorandums of Agreements with numerous governmental, educational and industry partners to foster education programs. Continued student membership growth at over 4% per year for each year.

As an academic, educator and commander, I have led numerous organizations, overseeing daily operations, budgeting and development of long-range infrastructure strategies and management. Here I present four examples:

By special request and appointment by Gen George Casey (Joint Unified Commander, Iraqi War) and Ambassador John Negroponte (US Ambassador to Iraq), I assumed command of the Joint Area Support Group-Central in the summer of 2004. As the Commander (Director), I took over a unit lacking the structure and discipline that should have accompanied the responsibility of managing a \$100M+ O&M and \$.5B Building budget. Understandably, during the initial invasion, operations had been hectic, but it was time in 2004 to ensure a clear strategy for spending and to account properly for the associated funds. I was assigned a capable civil engineering, finance and accounting staff by the Pentagon and within two months began implementing a strategy of developing Iraqi ownership through open, transparent coalition building with the Prime Minister's office. As I departed in May, we had published a

strategy for the infrastructure needed to support a functioning Iraqi Parliament, Prime Minister and Associated Ministries, as well as the Office of the Iraqi President. My team had initiated over \$100M of the building projects and seen several to completion. I was most proud of my unit and staff for helping to identify qualified Iraqi companies that had the ability to execute contracts for building, renovation and logistical support. In this way, we kept Iraqi oil money going to Iraqi companies, providing a boost to the war-torn Iraqi economy rather than to US, Europe and Asian companies, as the case had been when I arrived. In addition, the cost of setting up the contracts was far less than the bids received from non-Iraqi companies. As a result, the Iraqis also received a much better value for their funds.

As the Vice Provost, I was responsible for the budget process for the 700-member Dean of the Faculty mission element including the daily operations of 19 academic departments, 5 staff agencies, a \$7.3M operating budget and a \$300M facility. It quickly became clear to me that the process had been conducted in a much insulated environment with little input from the Division Chairs (Deans) and the Department Heads. Initially, my budget office resisted an inclusionary process, but in time grew to see the benefit of a detailed, outcome-oriented process that insured funds supported the General's and Departments' goals. By the second year, we were able to point directly to required funding to accomplish specific mission items, improving submissions and thus funding levels from the Academy Superintendent's (University President's) financial management office. I also found, along with many other secondary beneficial impacts, the Division Chairs became much more knowledgeable of operations and activities in each of their departments. As I departed, I took on two efforts to identify new infrastructure planning processes for the engineering division and the faculty as a whole.

As a member of the AIAA Finance Committee, I have shown constant leadership to help the Institute and its separate Foundation to develop the right strategic plan and roadmap that ensures financial viability of education programs for the future. The Foundation received an additional \$1M in Industry contributions and a matching \$1M from the Institute in 2014 to grow education program endowments. In total, the Foundation has now achieved almost half of the endowment funding required to sustain long term viability of education activities. I am starting to have a positive effect on the Budget Committee at Arkansas Tech. It is a slow process in which I am still gaining the trust of the staff and leadership involved, but the university has too many resources on the side-lines in my view.

As a final example, I use the Club Basketball Organization (Sharpshooters) I founded and grew in Colorado Springs from 1994 to 2004. In 1994, the Air Academy High School Men's Basketball Coach approached me about coaching a club team of 8th-grade boys in order to support his high school program. Managing a team of 12 boys, the associated league, multiple tournament schedules, travel and budget took a fair amount of my free time but filled my volunteer spirit needs. My overall budget the first year was about \$20K, but during the next decade, the Sharpshooters grew to be a 501(c)3 organization with a dozen teams for boys and girls from fifth grade to high school with an overall budget of over \$250K. Fortunately, along the way, I developed a network of parent volunteers to manage various aspects of the organization serving 100s of young basketball players.

Finally, while there have been numerous occasions in my years as a commander, Professor, Dean of Engineering, Department Head, and Vice Provost, to shape many different teams, I focus here on three opportunities that had evolutionary and revolutionary impacts not mentioned above.

Not realizing I would eventually become a department head at the USAFA, I worked on two important teams that would shape the future of the Academy faculty and the research programs used in the education of our graduates. The first team was formed to consider the move toward a civilian-military mixed faculty to replace the almost all military faculty. With the looming closure of the Frank J Seiler Research Labs at USAFA, the second team needed to consider a different way to support faculty and cadet research efforts. As is often the case in any large organization, the faculty was resistant to change. Much of the faculty was convinced that a civilian faculty would damage the "perfect" military education environment that had existed at the Academy since 1955. While I too enjoyed the status quo and an environment that offered young military educators an exciting dynamic environment in which to quickly mature while teaching a new course almost every semester, I had seen the tremendous value our civilian Distinguished Visiting Professors served in bringing expertise and insight to our curriculum. I also knew that our program was hampered in some ways by the lack of a stable senior faculty. At the time, an experienced faculty member was an associate professor on a second 3- to 4-year tour in education. On the other hand, like others of my colleagues, I wanted to avoid the pitfalls of a stagnant faculty with little motivation to assess its success by any means other than its own self-evaluation. In deciding the right mix, it was important the process be analytical, where possible. We were able to get some Department Heads to offer numbers based on specific duties within an educational organization that would best benefit from a civilian faculty. As the Team Lead, I had the pleasure of

briefing the Dean of the Faculty and the Department Heads on a recommend mix of faculty (75% mil/25% Civ). The greatest benefit we expected to see, the stability to the curriculum that having senior civilian faculty provided, has turned out to be very important to transform the engineering division in the research area. It has also been a tremendous benefit in responding to ABET 2000 accreditation requirements. The stability in the curriculum has provided time for younger faculty and therefore their students to be more involved in cutting edge DoD, AF and NASA research. The stability of the faculty helped us solidify the assessment process so critical to improving our program while meeting ABET's and now the Higher Learning Commission's accreditation criterion.

In 1997, a handful of Research Directors were selected to determine the impact of the closure of the Seiler Labs at USAFA and a recommended way ahead. I was chosen to do much of the write-up and briefing of our recommendations. We had been relying upon the Seiler Research Labs, located at USAFA as a tenant organization, to include our faculty and some cadets in research. The closure gave us the opportunity to reinvent our research programs, with the help of the AF Office of Scientific Research, so more faculty had ownership and cadets would be involved in research. The new Centers receiving initial funding had the responsibility of including faculty and most importantly cadets in research, as their primary reason to exist (a critical decision). Secondly, each center was responsible for raising its own funding based on the value of their work. Both decisions allowed me as a department head to boast that every aeronautical engineering graduate had been involved in a research project with a real customer and producing results that mattered to the AF, DoD or NASA. Over the past decade we slowly exported that philosophy to the other engineering departments, allowing me later as the Engineering Division Chair to boast the largest and fastest growing undergraduate engineering research program in the country. The overall result continues to be that cadets graduate with more than an understanding of the theory of engineering but also with practical knowledge of how to solve a customer's engineering need through research.

Finally, as a third example, as a young Permanent Professor and Department Head, I had the privilege of meeting with the Chief of Staff of the Air Force and the Chief Scientist of the Air Force for a discussion about systems engineering (SE) and whether the SE major was appropriate at the undergraduate level. I was convinced that systems engineering should be postponed to a graduate degree experience and SE knowledge was often developed in a practicing engineering environment through years of practical experience. As a result, I soon found I was assigned to the Chief Scientist for several trips where he involved me in program reviews and a workshop in which systems engineering experts contemplated an undergraduate curriculum. During those months, I soon understood how systems engineering had failed a number of important programs and how far the development of analytical SE tools had progressed. With the help of my professors, we were the first department to develop a roadmap for a systems engineering track. Our model soon spread to be the template for the other engineering programs. I then assumed oversight of the SE program. I moved the overall administration under the Aeronautics Department and the program's curriculum oversight under the Dean of Engineering, where it remains very successfully as our largest engineering major. As a testimony to the program's success, my design professors now all agree they would never go back to the days before the SE program. Today, SE students are split among our various design courses and provide incredible value to integrating the team's efforts and insuring the customer's needs are met. The latest SE success was in helping our propulsion design team win DARPA's Academies' 2014 Design Competition. A program that a few years ago received little support from my fellow department heads now receives almost unanimous support for its curriculum and funding.

As a final note, all of these experiences have been important to my time at Arkansas Tech. At ATU I found a College and a supporting bureaucracy steeped in the past and reluctant to change. It has taken all of my skills and knowledge to turn the turn the ship. It has been challenging but one I enjoy thoroughly!

NEAL BARLOW, PhD

LEADERSHIP QUALIFICATIONS

While I have addressed experiences in the position Qualifications that also apply to leadership, here I present additional targeted experiences demonstrating my senior leadership style and qualifications.

(1) Problem Solver

2005 – 2008 Vice Dean of the Faculty, (Vice Provost equivalent) – After being in the position for several months, it became clear to me the previous Vice had a different leadership and managerial style. My approach tended to be more open and transparent, when possible and to be more inclusive of knowledgeable members of the faculty. Even though it was the Department Heads and Agency Heads who knew the most about their personnel and budget needs, their involvement in the budget and personnel manning model was limited to their annual budget request and aspects of the manning model. Most aspects of the budget and manning allocation process were closely held. As a result, much skepticism and distrust existed among senior leadership outside the Provost Office. Some in the Budget and Personnel Offices, including the excellent Agency Heads, believed that if we wanted proper control of the issues we needed to keep details from the Department Heads. By changing the processes in each area, and with the added support of senior department and agency leaders, I soon was able to make smarter decisions. Although I could not please everyone, I gained their support when they understood why decisions and allocations were made. The long term result was a permanent change in the way the Provost Office works budget and personnel. Even though the Budget and Personnel Office Heads are still the same, they too have become believers and have seen the benefits of an open, transparent approach by the front office.

2000-2004 Permanent Professor and Head, Department of Aeronautics – Student involvement in R&D research. As I became the department head of the Aeronautics Department, I soon realized that the laboratory program required by ABET accreditation had remained very stagnant over the past decade. For most cadets, the experience involved canned exercises to introduce the new engineer to sensors and acquisition systems while collecting data for a project. The final project was with a faculty member but, in the majority of cases, involved a project the professor had accomplished many times with a known “right answer.” In 2001, I had the chance to hire a new Research Director. I challenged him to bring in more projects in which cadets could be involved in a “real” problem solution. By 2004, he had done just that. The final research project required mentoring by a professor on a DoD, AF or NASA project. The cadet’s report and briefing now included a much more realistic problem statement and value-added research resulted. The growth in cadet research also meant a growth in research funding. As the O&M budget shrunk over the past decade, we leveraged our research funding to maintain lab research activities, including manpower to support cadet education through research. I am proud to say this mindset has spread to other engineering and science departments and many of my divisional engineering majors in astronautics, mechanical, electrical and computer engineering are involved in real world research as they learn engineering skills and knowledge. Also as a consequence, the Aero Department annually has more cadets funded by external agencies for cadet summer research programs than any other engineering department.

2004 - 2005 Commander (Director), Joint Area Support Group, Multi-National Forces-Iraq Embassy Baghdad, Iraq – When I first arrived in Iraq in the summer of 2004, I was assigned to Ambassador Negroponte with the responsibility to work with the United Nations as their liaison in Iraq. In August of 2003, Abu Musab Zarqawi, a prominent Al-Qaeda leader, had led an effort that resulted in the bombing of the Canal Hotel in Baghdad where the United Nations Iraq was housed. As a result, the United Nations made the decision to depart and have no presence in Iraq. President Bush, wishing to show that the Coalition had the support of the United Nations, pressed the State Department to get the United Nations back into Iraq. I supported that effort in primarily logistical and security ways. During my first month in-country, I identified a building, an old elementary school on the edge of the Green Zone boundary, and a security group of marines who could provide the middle ring of security. I negotiated to extend the Green Zone boundary (“safe area”) walls around the school and for the detachment of Marines to secure the site and the site’s entry control. I also worked out a contract with KBR, Inc. acceptable to the UN for food, furniture and computer support. These efforts involved working with the Iraqi Interior Ministry, the US State Department, the UN, the Marine Divisional Commander supporting security for the Zone, and coalition contractors. I’m proud to say that six weeks after my arrival, I represented Ambassador Negroponte as Ambassador Ashraf Qasi of India, flew into Iraq aboard a US C-130 and I delivered him and his UN staff to the Green Zone to begin permanent operations in Iraq. As a result of my efforts, the Ambassador and the Coalition Commander in Iraq appointed me as the Commander of the Joint Area Support Group, Multi-National Forces-Iraq shortly thereafter.

2008-2013 Chair, Engineering UAV Research Center– While serving as the Dean, I led the effort to establish the UAV Research Center at USAFA. While we had multiple research efforts taking place within the Division and USAFA concerning UAVs, a consolidation of those efforts offered an opportunity to attract more UAV research and, consequently, involve more cadets in UAV research. I worked with the Aeronautics Research Director, the Head of the Electrical and Computer Engineering Department, our resident Test Pilot and the 306th Operations Group to gain support and to present a plan to the Provost for chartering and supporting flying operations for the UAV Center. The Center now serves as the backbone for numerous UAV research efforts and involves cadets in engineering, science and social sciences in real world UAV research efforts. At this time, the Center is alive and growing as part of the Academy’s effort to maintain relevant academic and education programs.

(2) Leadership

Although I could use examples from service in my academic positions over the past three decades, I choose here to use service in two related organizations in which my leadership has been important to engineering education and involved working with industry, government and academia.

AIAA – Beginning in 1986, I became involved in service to the American Institute of Aeronautics and Astronautics (AIAA). Many of my mentors were AIAA active members and had developed my understanding of the importance of professional societies to the support and success of engineering to the US economy and the military R&D establishment. I initially served as the Secretary of the Rocky Mountain Section of Region V, keeping minutes and working administrative issues for the Section. Since that time, I have served in numerous appointed and elected positions for the Institute. In 1994, I was appointed as member to the National Student Activities Committee of AIAA. I worked on Student Conferences and by year’s end received money from the Institute’s Development fund to support the first team competitions as part of the International Student Conference. In 1995, I was appointed as the Region V Deputy for Education and, in 2001, was elected by the Student Activity Committee as Chair. I’m proud of numerous changes I made to AIAA’s student programs in working with our 50+ industry, academic and government members. In 2007, I was recruited by several Board members to run for the Institute Board and the Vice President of Education position. Having been elected in a

three way race by the 35,000+ membership, I served as the VP elect and then Vice President through 2013. During my tenure, I made significant changes to and gained support for initiatives in Student Activities, Academic Affairs, Scholarships and K-12 Science Technology, Engineering and Math (STEM) Outreach. In 2010 we changed the name of our K-12 Committee to K-12 STEM Outreach to emphasize the focus of the Committee's work on attracting new talent to the STEM fields. I received grant to develop student and teacher workshops as well as money to grant teachers for innovative STEM efforts. In 2012, I was elected by Institute membership to the AIAA Board as a Director-at-Large. Also in 2012, I was nominated by a long time mentor and Board Member for the rank of Fellow and, in recognition of my professional accomplishments, in 2013, I was selected as an AIAA Fellow.

ABET – Since 2004, I have served as Accreditation Evaluator for the ABET, Inc., national and international aerospace accreditation process. I was nominated by fellow aerospace engineering professionals and appointed by the Chair of Academic Affairs Committee for AIAA to ABET. After spending a year as a trainee, I have now been the evaluator for seven different major schools for their six-year accreditation visit. It is my responsibility to insure programs meet the eight general criterion and additional program criterion required by AIAA. Accreditation requires evaluation efforts and continues improvement culminating in a self-study report and an evaluating team visit. I'm proud to have been elected to this position and to help insure the aerospace programs in our nation and internationally continue to improve the programs they offer their students and the products they produce for their constituencies.

(3) Professional Stature

In this case, many of the examples I've provided in the Qualifications paper provide evidence of this professional quality. I list here, in short, several already mentioned examples as well as several additional examples not previously mentioned elsewhere.

2000 – 2015 USAFA Permanent Professor – Presidential nominee, Senate approved Permanent Professor; selected from all active duty officers with an appropriate PhD. Only 3 in Aeronautical Engineering since 1955.

2002 Accreditation Evaluator, ABET Inc. – Nominated by and selected by professional peers to serve as an evaluator for academic accreditation in the aerospace academic major.

2008 – 2015 Liaison, Academy School District 20 Board of Education, Colorado Springs, CO – Nominated by USAFA Dean (Provost) and Appointed by USAFA Superintendent (President) to fill Charter-mandated position on District 20 Board representing military families in the Colorado Springs area. Attend bi-monthly Board Meetings; attend special Board meetings to consider high-interest issues; attend teacher and student events, to include all seven high school graduations; and attend and speak at numerous award ceremonies.

2013 -2014 Acting Chief Scientist Air force Space Command – Selected by Air Force Space and Cyber Commander to fill 15 month Chief Scientist position, while a new civilian SES was selected for the position

2013 Fellow, American Institute of Aeronautics and Astronautics – Nominated and selected for Fellow by a senior review committee of Fellows and Honorary Fellows in recognition of professional accomplishments. One Fellow may be elected for each 1000 professional members of the AIAA.

2013 National Academies AF Studies Board – Selected by AF Space Command Commander to organize topics and direct the workshop of the National Academies 2014 AF Studies Board. The Board considered topics important to the Air Force's ability to accomplish its mission in the demanding 21st century environment. I organized and got approval for the briefings and topics the Board considered. I took part in all sessions of the Board and helped to frame the findings of the Board. The Board consisted of 10 high ranking retired General Officers, Industry Leaders and Senior Academics.

2015 ABET Commissioner – Nominated by AIAA Academic Affairs Committee and Appointed by AIAA Board to serve as ABET Commissioner for engineering beginning the summer of 2015