POSITION PAPER

ON

THE AIR FORCE SHOULD NOT RECRUIT ONLY OFFICERS WITH SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH (STEM) DEGREES

1. The Air Force should not recruit only officers with science, technology, engineering, and math (STEM) degrees. Officers with STEM degrees are not qualified for the career fields that require special skills and professional degrees such as Doctor of Medicine (MD) and Doctor of Law Degree (JD). Although STEM degrees are valued in some non-STEM required career fields, recruiting only officers with STEM degrees will turn away many great officers with non-STEM degrees.

2. The Air Force should recruit officers from various education background and skills to fit different career fields. There are 26 officer career fields that are identified by Air Force Specialty Codes (AFSCs).1 Only five career fields require a STEM degree.2 Some career fields require special skills and professional degrees such as MD and JD. The officers with STEM degrees are not qualified for the professional career fields.

3. Some officer career fields, such as intelligence, cyberspace, personnel, acquisition management, logistics, space and missiles, have no stated requirements for degrees.3 The officers with STEM degrees are valued in these career fields, because the skills, e.g. logical, systematic, critical and analytical thinking, and problem solving that the STEM graduates have, are essential to perform the duties in non-STEM required career fields.4 The Air Force heavily relies upon the modern technologies to possess compelling air, space and cyberspace capabilities. The growing complexity of both traditional and future missions will likely increase STEM degree needs.5 Air Force future missions will become more technologically demanding and will rely on a correspondingly larger STEM workforce in many career fields across the Air Force.6 It is predicted that while over 5,100 the Air Force officers with STEM degrees currently serve in some non-STEM required areas, some 3,200 more officers with STEM degrees are required to meet current needs.7

4. The thing that separates military officers from all other professions is officership.8 “*Officers must see themselves first as military leaders and secondly as specialists such as pilots, engineers, financial comptrollers, logisticians, air battle managers*.”9 There are many soft skills such as integrity; charisma, inspiration, visionary, effective team building, and communicating are all essential for becoming great leaders.10 None of the last four Chief of Staffs of the Air Force have a degree in STEM.11-14 Should the Air Force recruit only officers with STEM degrees, it will turn away many great future leaders.

5. This position paper was on the topic that the Air Force should not recruit only officers with STEM degrees. Officers with STEM degrees are not qualified for the career fields that require special skills and professional degrees such as MD and JD. Although STEM degrees are valued in some non-STEM required career fields, recruiting only officers with STEM degrees will turn away many great officers with non-STEM degrees.

END NOTES

1. Air Force Studies Board, *Examination of the U.S. Air Force’s Science, Technology, Engineering, and Mathematics (STEM) Workforce Needs in the Future and Its Strategy to Meet*

*Those Needs* (The National Academies Press, 2010), 31.

2. Ibid.

3. Lisa M. Harrington et al., *Air Force–Wide Needs for Science, Technology, Engineering, and Mathematics (STEM) Academic Degrees* (Santa Monica, CA: RAND Cooperation, 2014), 3.

4. Ibid., xiii.

5. Ibid., 19.

6. Ibid.

7. Ibid., xi.

8. Lt. Col. Gary T. McCoy, *Developing Officership: It Starts At The Top* (Maxwell AFB, AL: Air University, April 1996), 4.

9. Ibid., v.

10. Brigette Hyacinth, *Are Leaders Born or Made? A True Story*, https://www.linkedin.com/pulse/20141026042807-150905450-are-leaders-born-or-made-a-true-story.

11. General Mark A. Welsh III, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/104966/general-mark-a-welsh-iii.aspx.

12. General Norton A. Schwartz, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/104626/general-norton-a-schwartz.aspx.

13. General T. Michael Moseley, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/104651/general-t-michael-moseley.aspx.

14. General David L. Goldfein, http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/108013/general-david-l-goldfein.aspx.