

**UNITED STATES AIR FORCE  
RESEARCH LABORATORY**

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**DETERMINANTS OF ENLISTED  
AIR TRAFFIC CONTROLLER SUCCESS**

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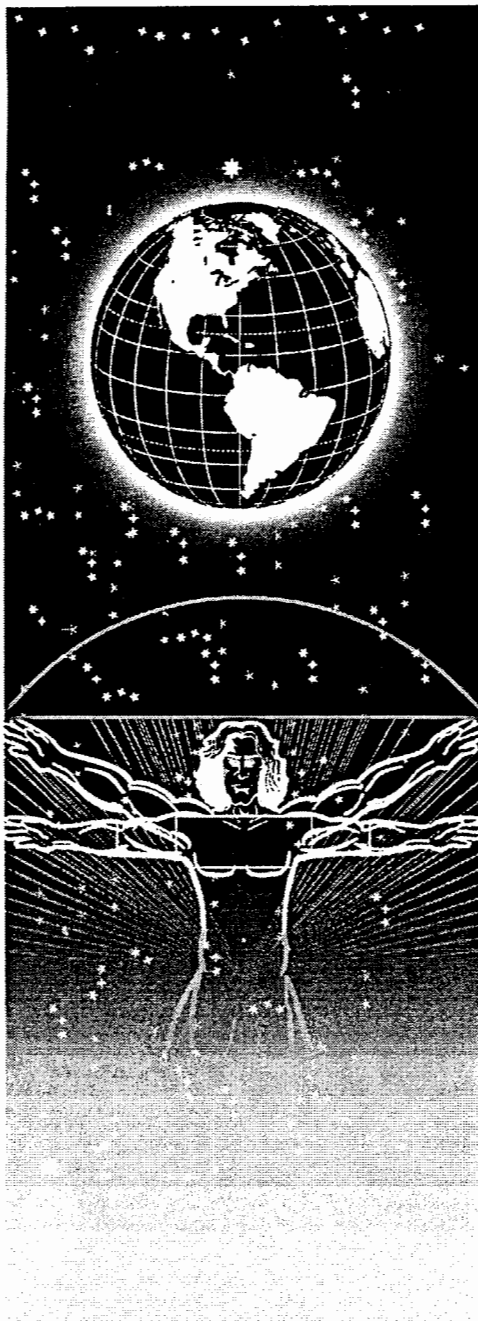
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13. ABSTRACT (Maximum 200 words)  This report provides a brief historical overview of air traffic controller (ATC) selection, reviews current US Air Force selection procedures for enlisted ATC trainees, and summarizes results of three recent studies. Study 1 examined the validity of the operational selection test (i.e., Armed Services Vocational Aptitude Battery, or ASVAB) against apprentice (3-level) training performance. Study 2 evaluated the effect of alternative selection procedures on training attrition and eligibility for training. Study 3 reviewed the results of a survey designed to identify the personnel characteristics and organizational factors that influence training and job performance of enlisted ATCs. Results indicate the ASVAB composites had acceptable validity for predicting apprentice-level training performance (Study 1). Alternative cut-score analyses (Study 2) reveal that raising the minimum General composite in order to reduce attrition by 5% leads to an unacceptable 20% reduction in the number of eligible ATC candidates. Using a different composite (Electronic) for training qualification would have less of an overall impact on qualification rate, but would disproportionately disqualify females for ATC training. Results of the survey (Study 3) indicate that enlisted ATCs were generally satisfied and motivated. In addition, job incumbents identified several abilities required for on-the-job performance that are not measured by current selection procedures (i.e., ASVAB). These included memorization and retention of new information, spatial orientation/visualization, ability to work well in stressful environments, ability to shift between two or more sources of information, and ability to combine and organize information. Implications for enlisted ATC selection and training as well as future research directions are discussed.			
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