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Gender Differences in Factors Influencing Retention in Aviation Occupations

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Gender Diversity in Aviation Occupations in the U.S.

**Katie Kirkpatrick, Katya Rivera, Marisa Aguiar,
Lindsay Stevenson, & Haydee Cuevas**

Problem Statement

Gender diversity seriously lacking in aviation domain across workforce

- **Pilots, controllers, aviation maintenance, etc.**

Research Questions (RQ)

- **RQ1: How do the number of male and female employees compare in aviation occupations in the United States?**
- **RQ2: What factors contribute to the retention of females, as compared to males, in aviation occupations in the United States?**

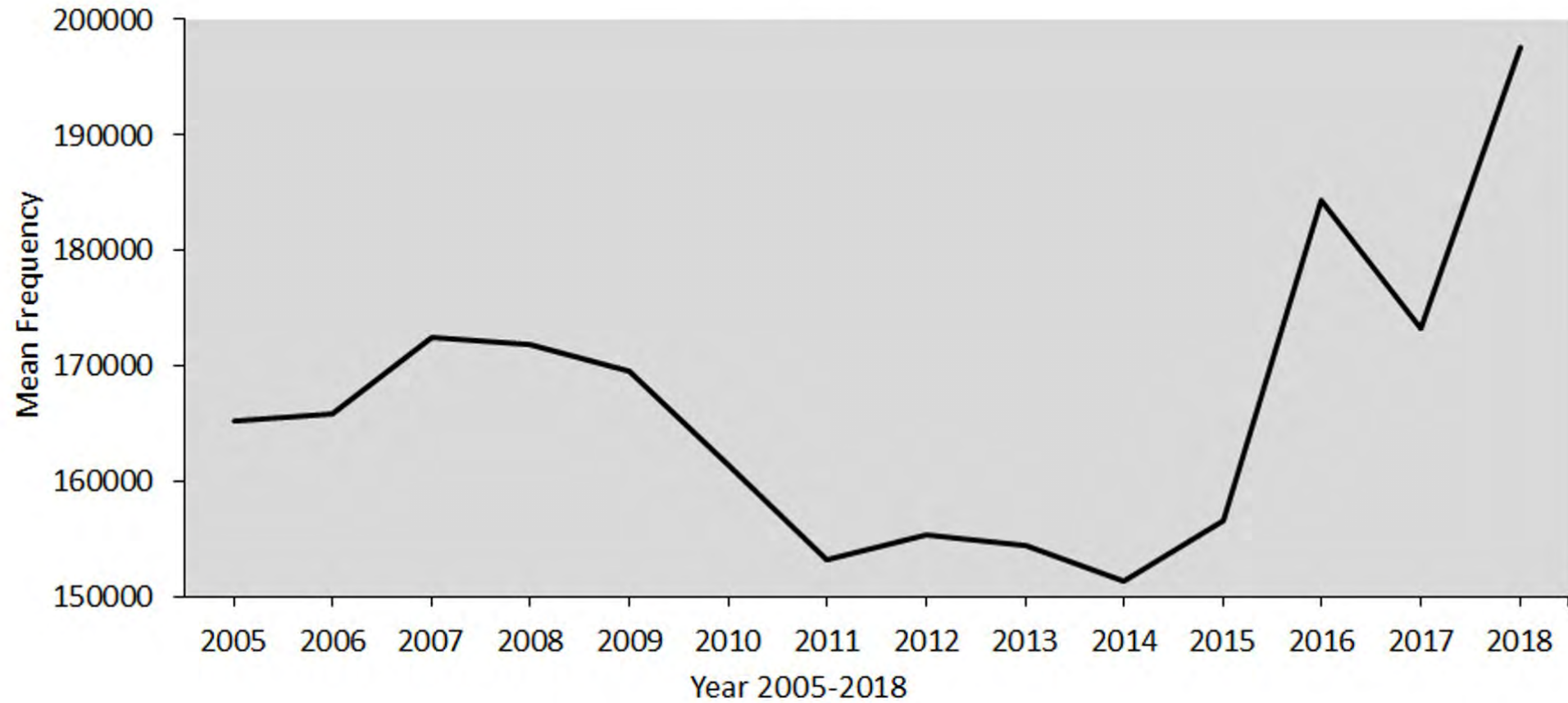
Methodology

RQ1

- **Approach: Archival Study**
- **Data Source: PUMS**
- **Time frame: 2005 - 2018**
- **Six Occupations:**
 - **Aircraft Pilot and Flight Engineer**
 - **Aerospace Engineer**
 - **Aircraft Structure / System Assembler**
 - **Avionics Technician**
 - **Aircraft Mechanic and Service Technician**
 - **Air Traffic Controller / Airfield Operations Specialist**

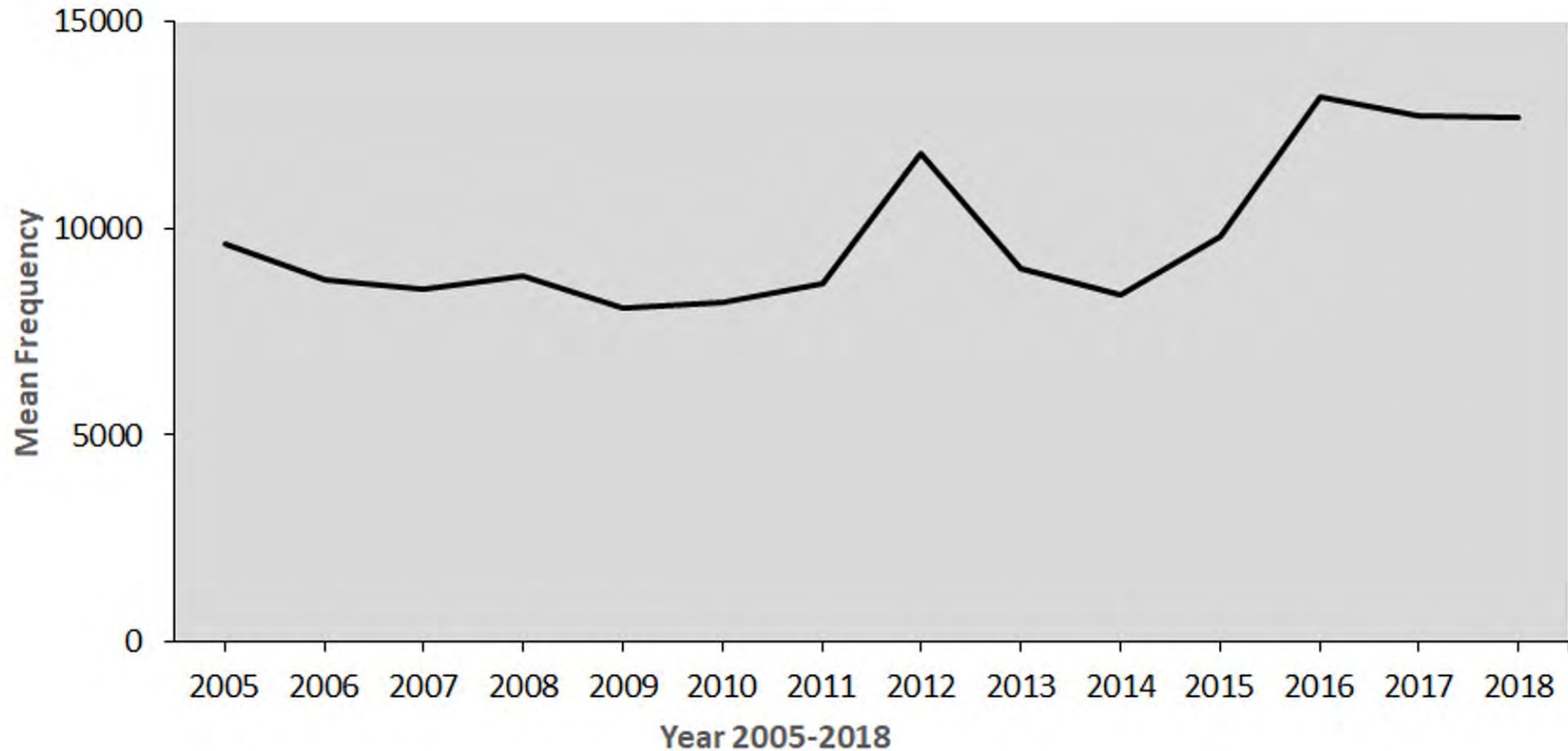
AIRCRAFT PILOTS AND FLIGHT ENGINEERS

Males

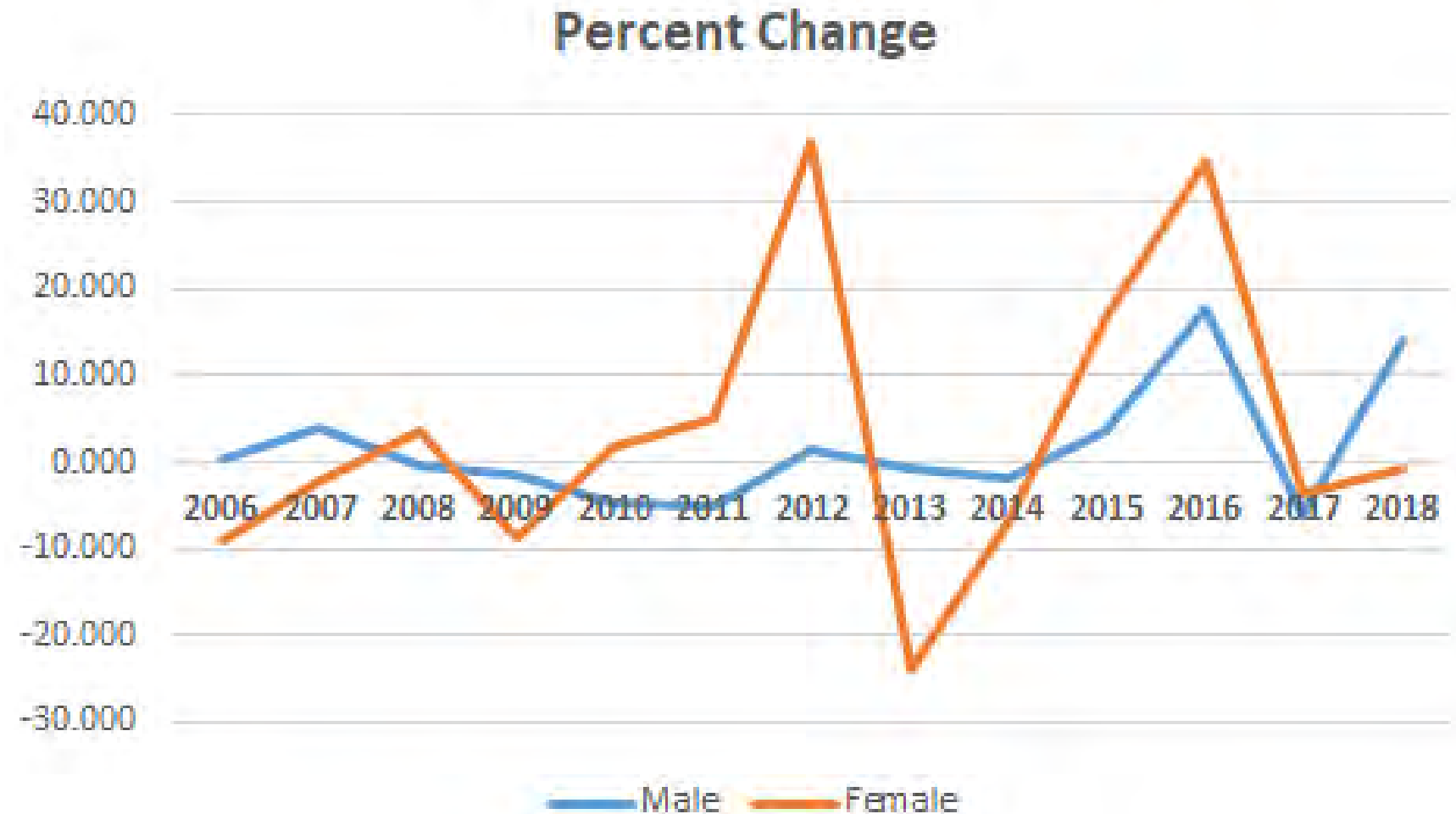


AIRCRAFT PILOTS AND FLIGHT ENGINEERS

Females

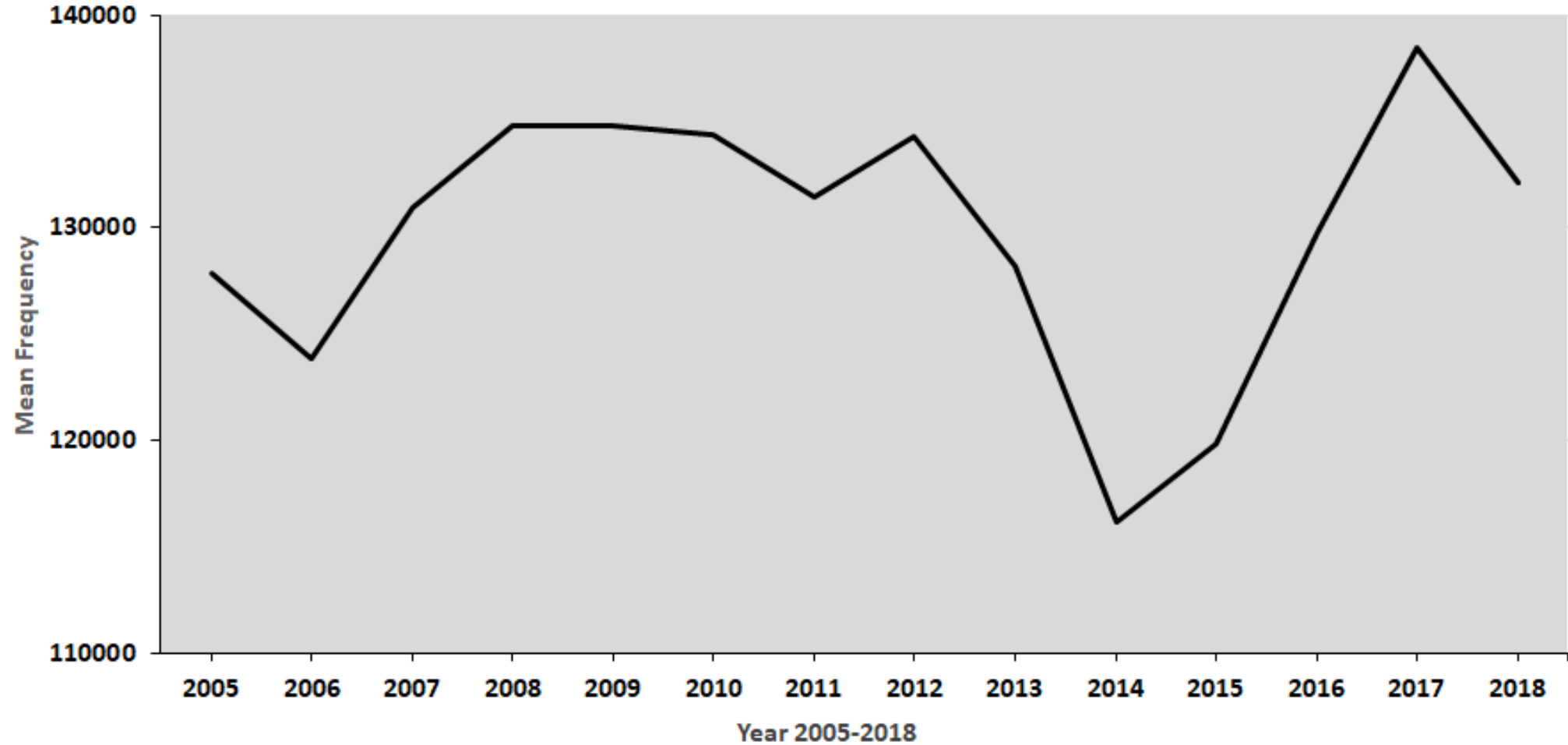


AIRCRAFT PILOTS AND FLIGHT ENGINEERS



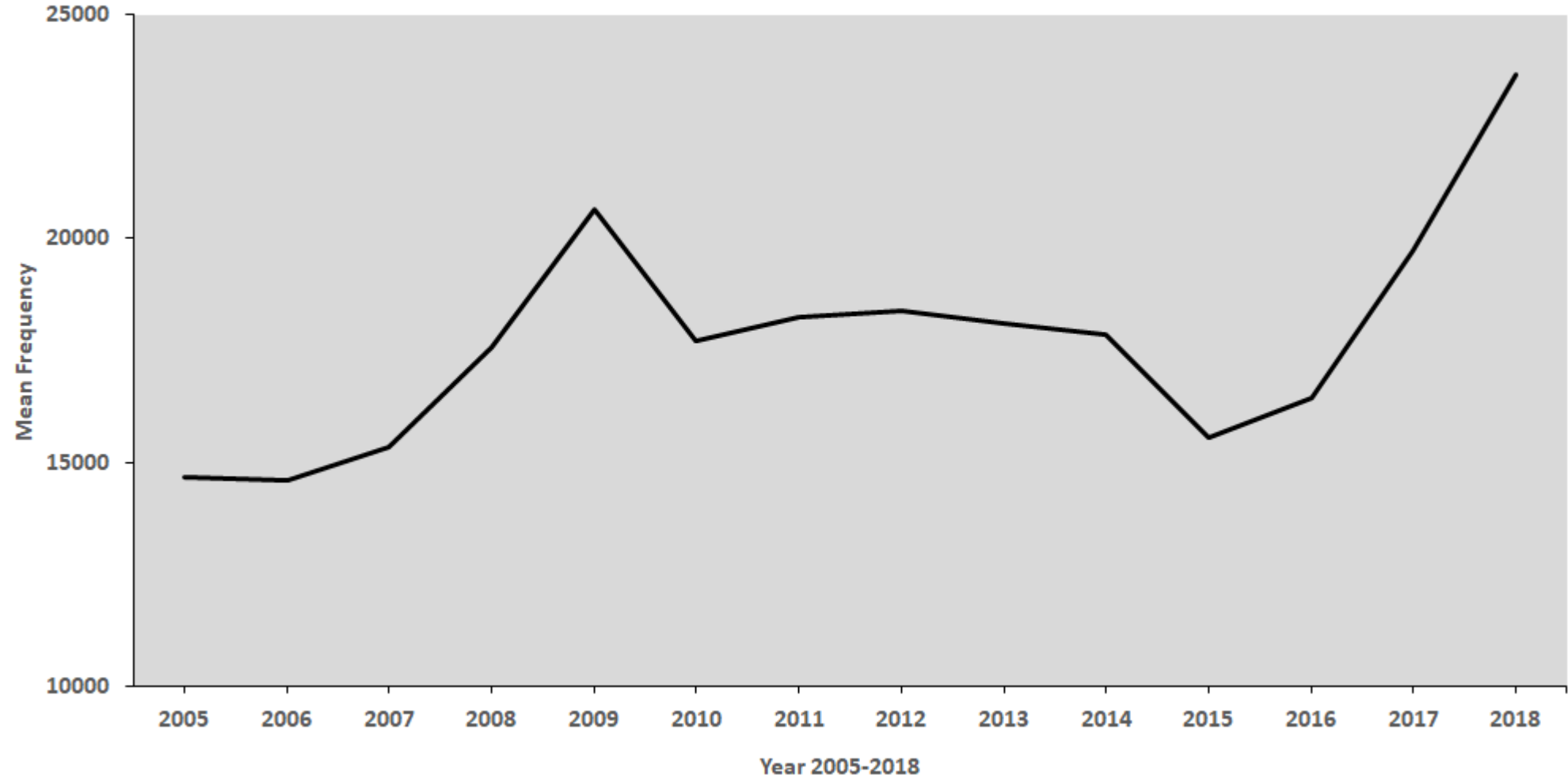
AEROSPACE ENGINEERS

Males



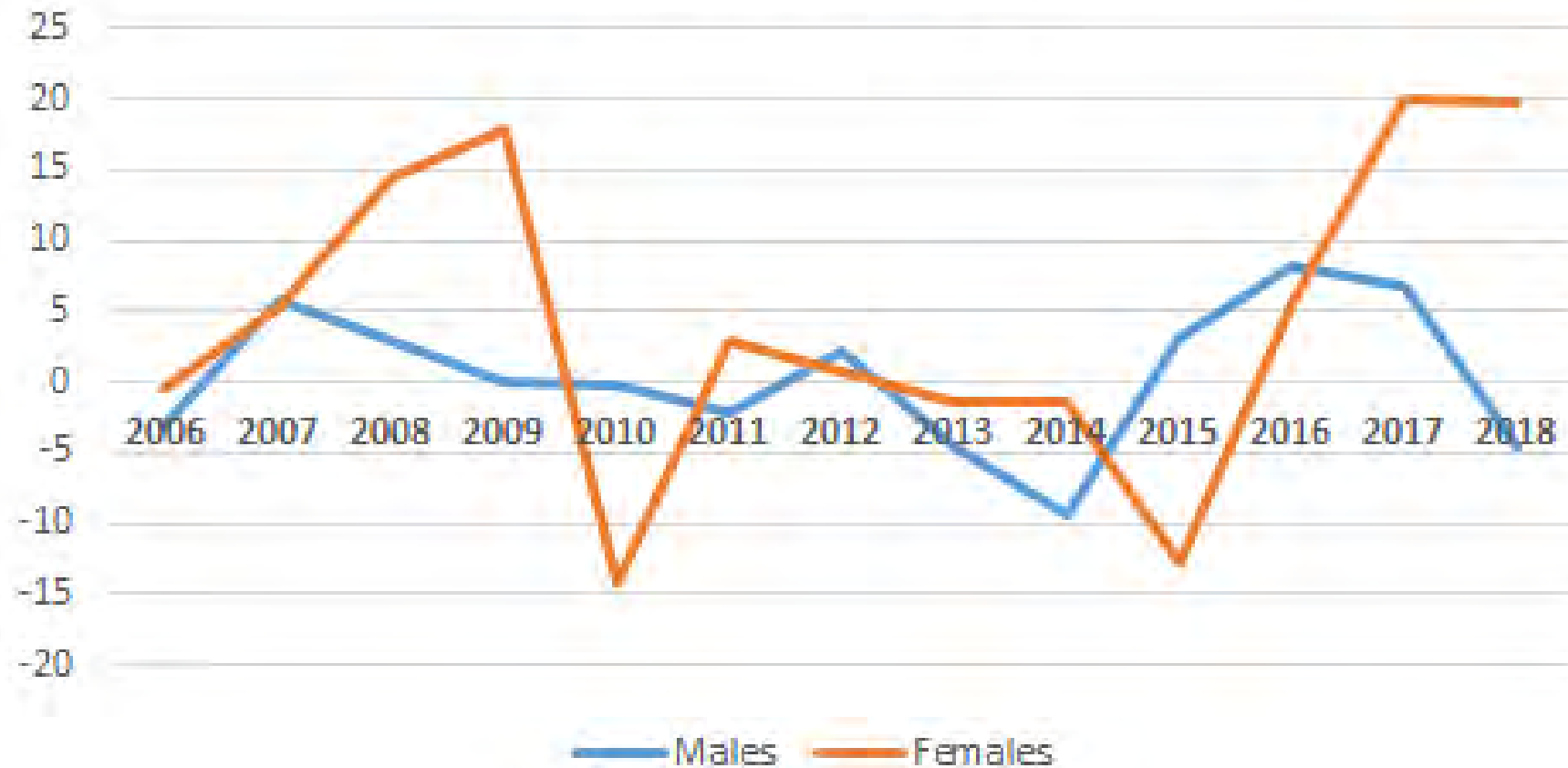
AEROSPACE ENGINEERS

Females



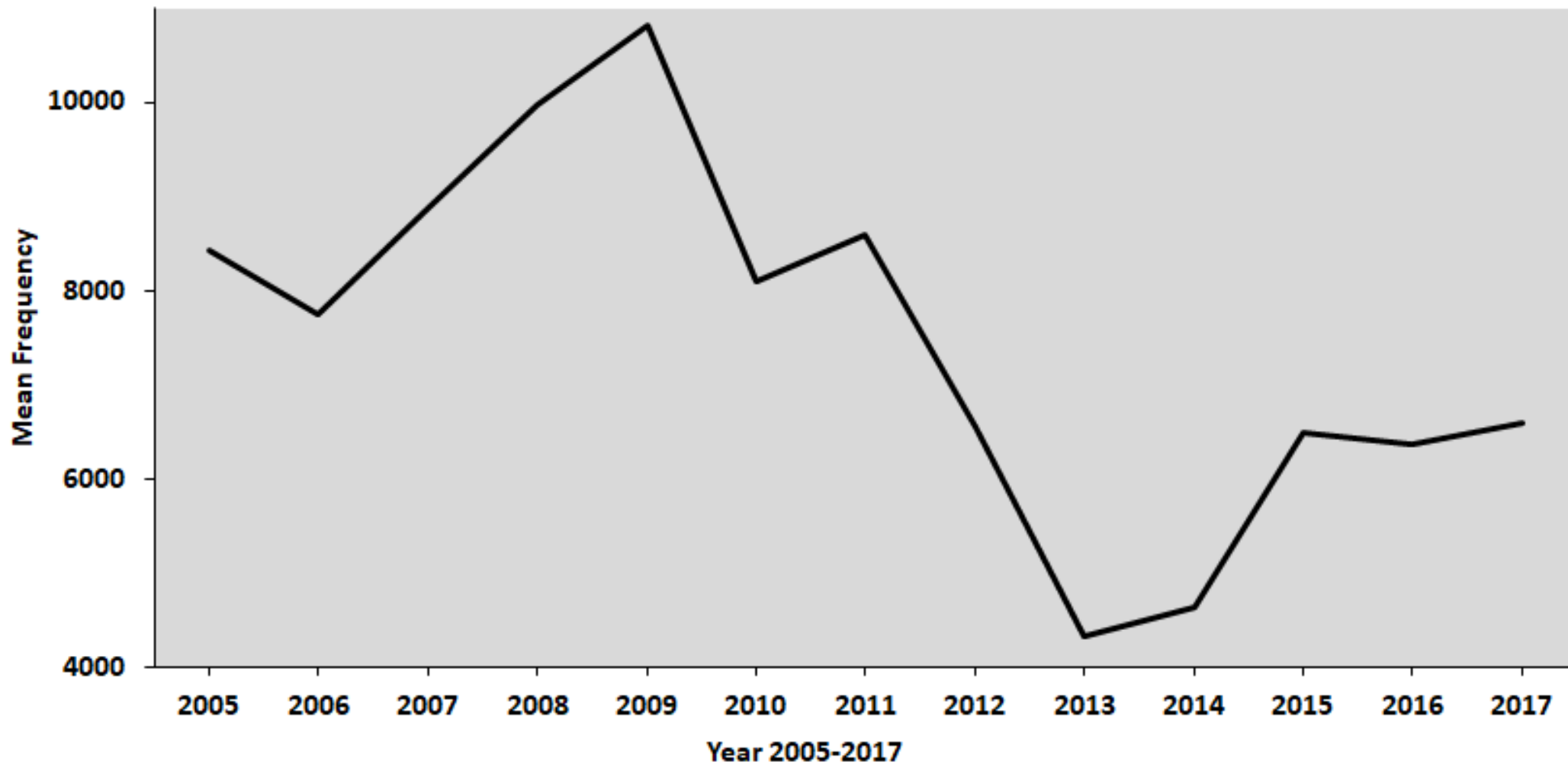
AEROSPACE ENGINEERS

Percent Change



AIRCRAFT STRUCTURE / SYSTEM ASSEMBLERS*

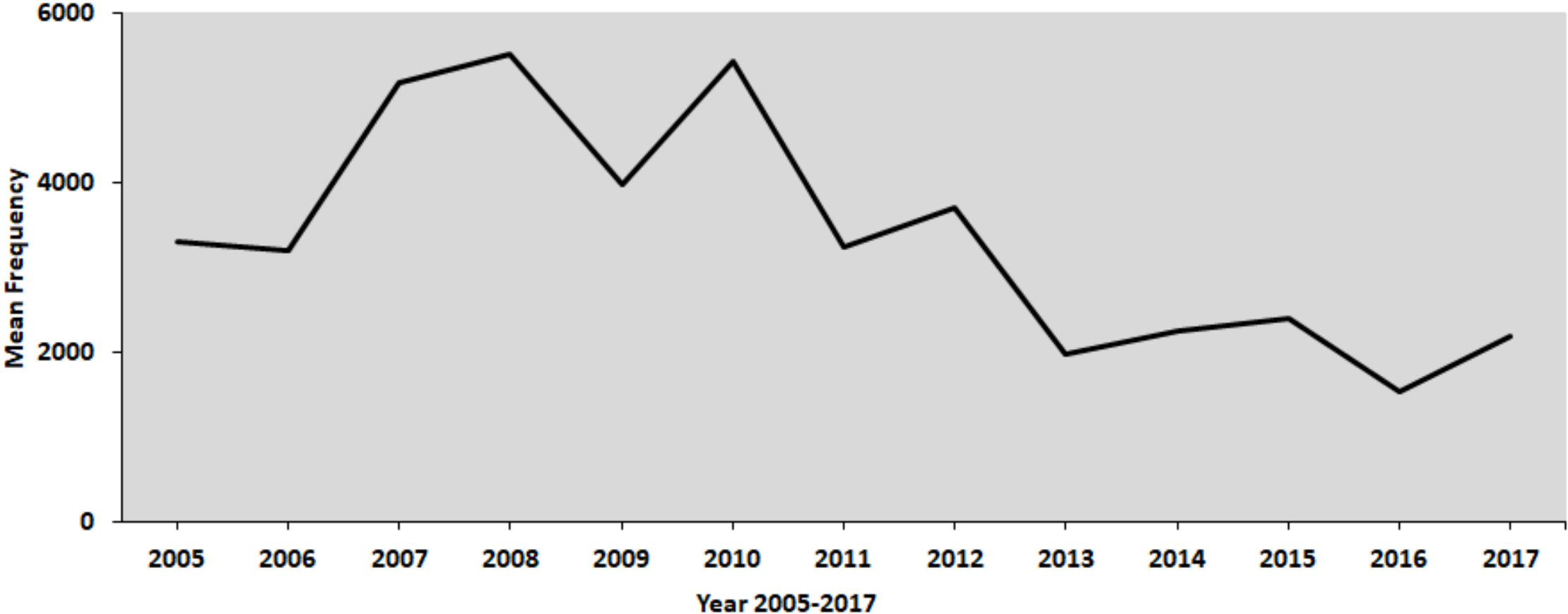
Males



**No data for 2018*

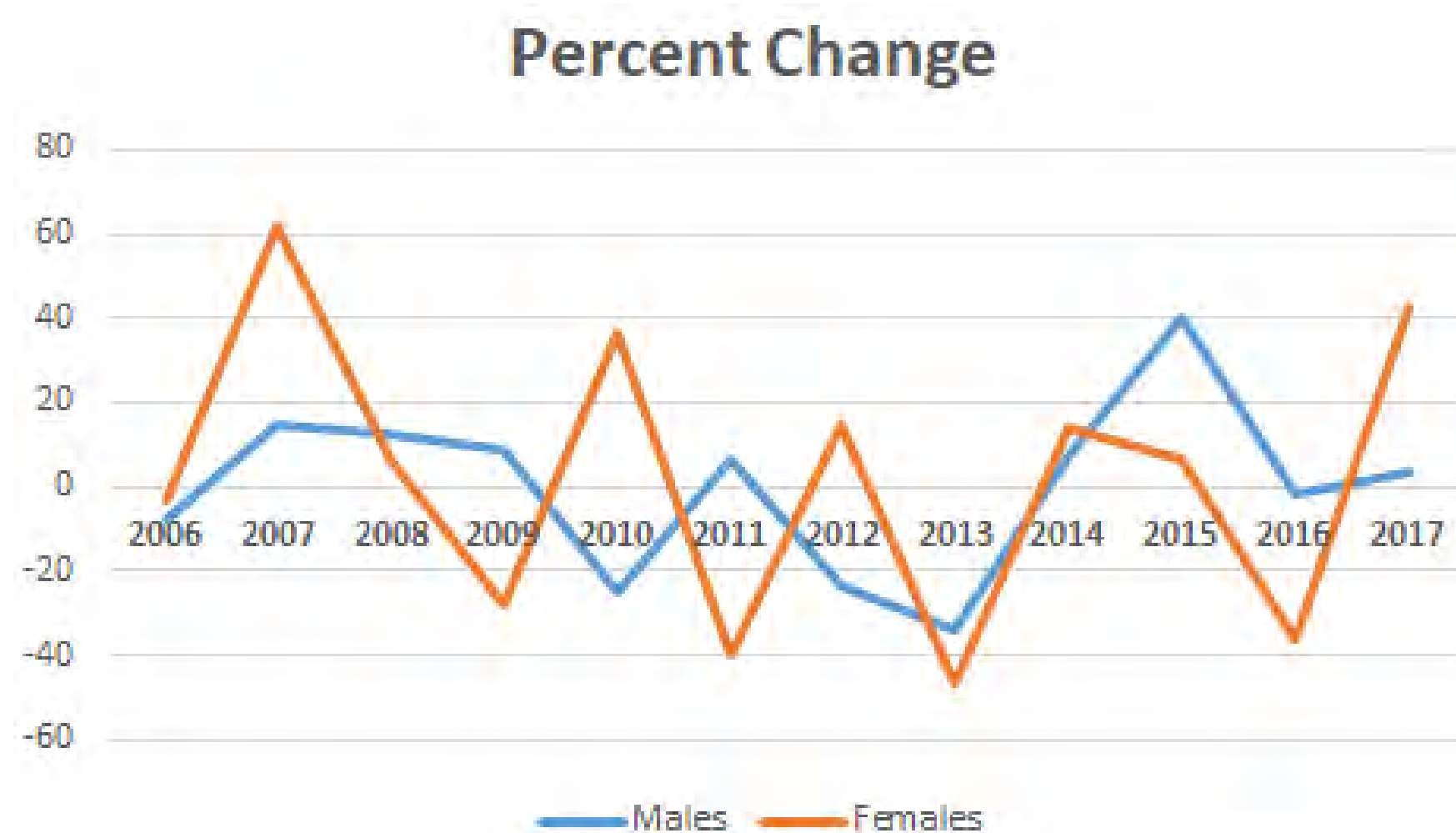
AIRCRAFT STRUCTURE / SYSTEM ASSEMBLERS*

Females



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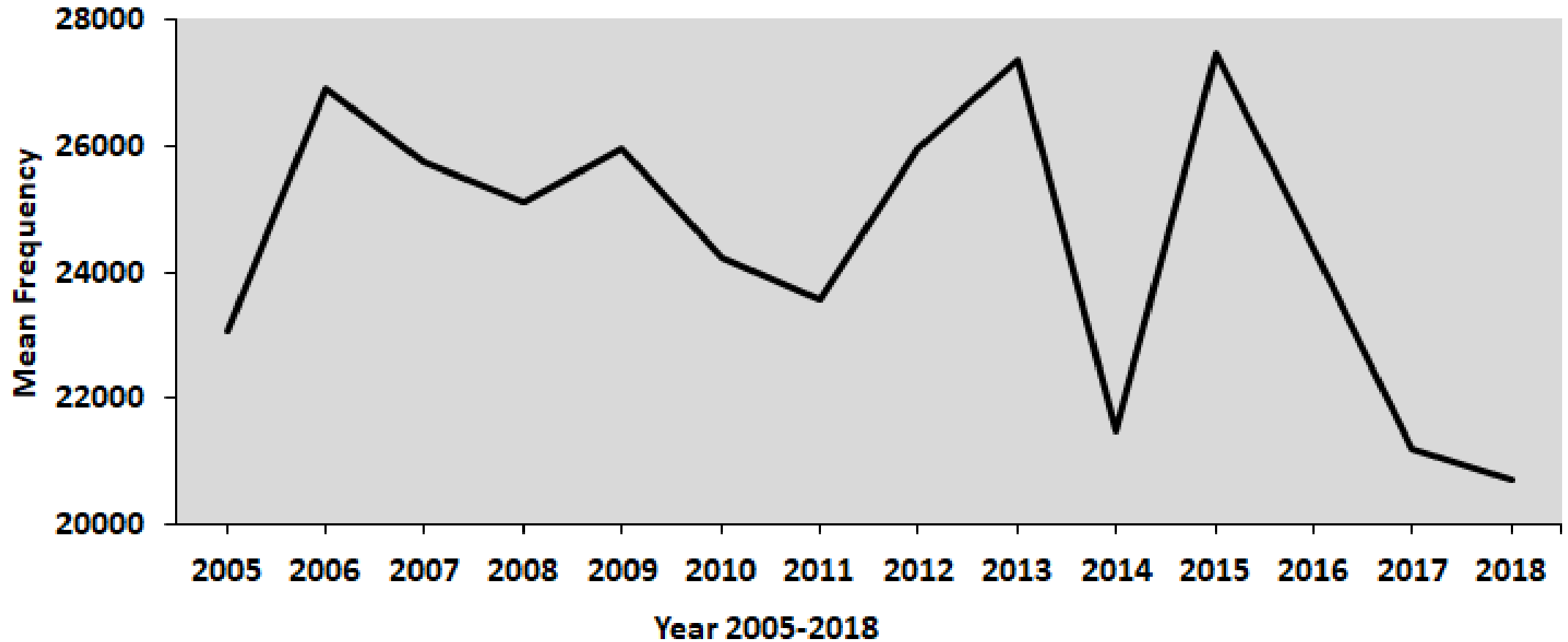
AIRCRAFT STRUCTURE / SYSTEM ASSEMBLERS*



*No data for 2018

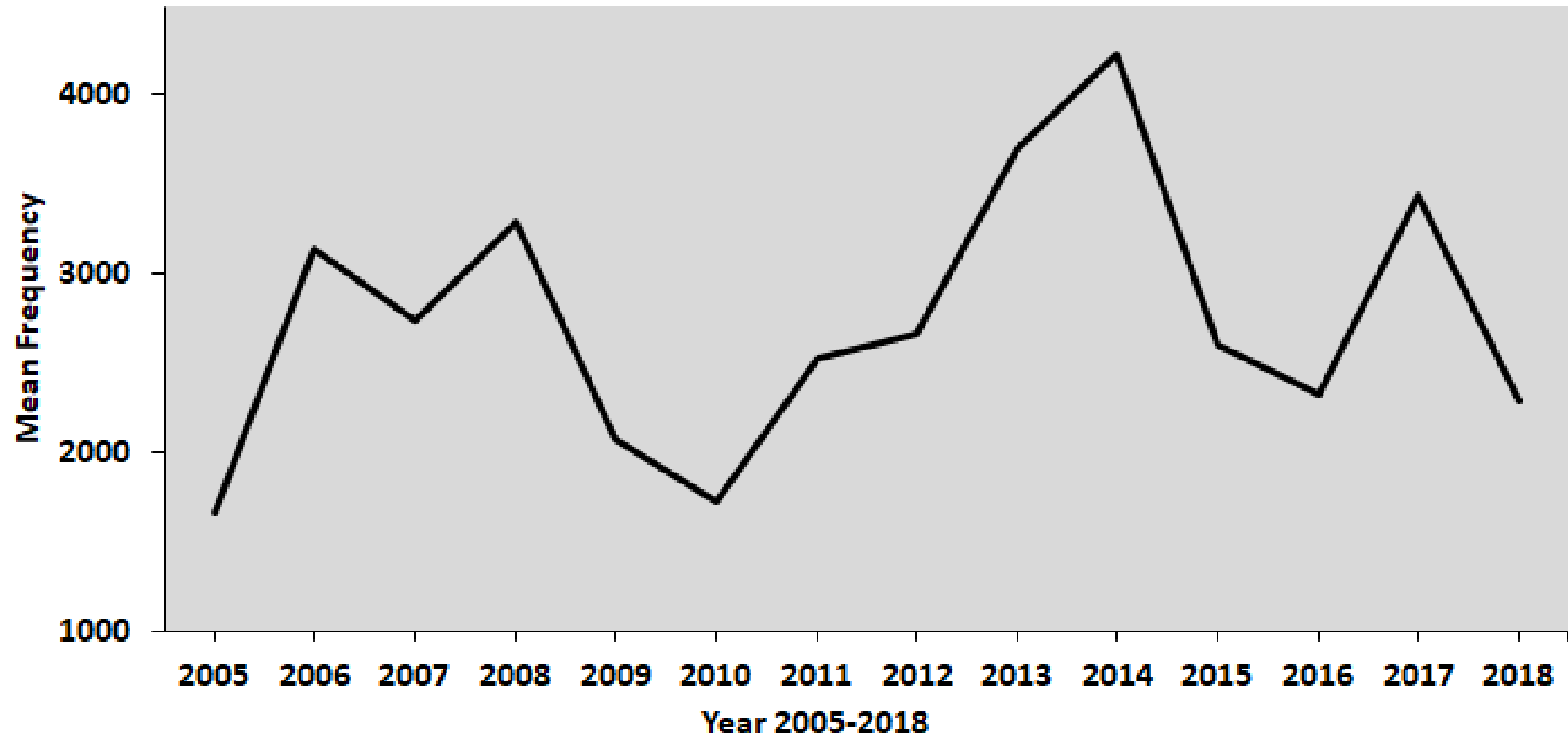
AVIONICS TECHNICIANS

Males



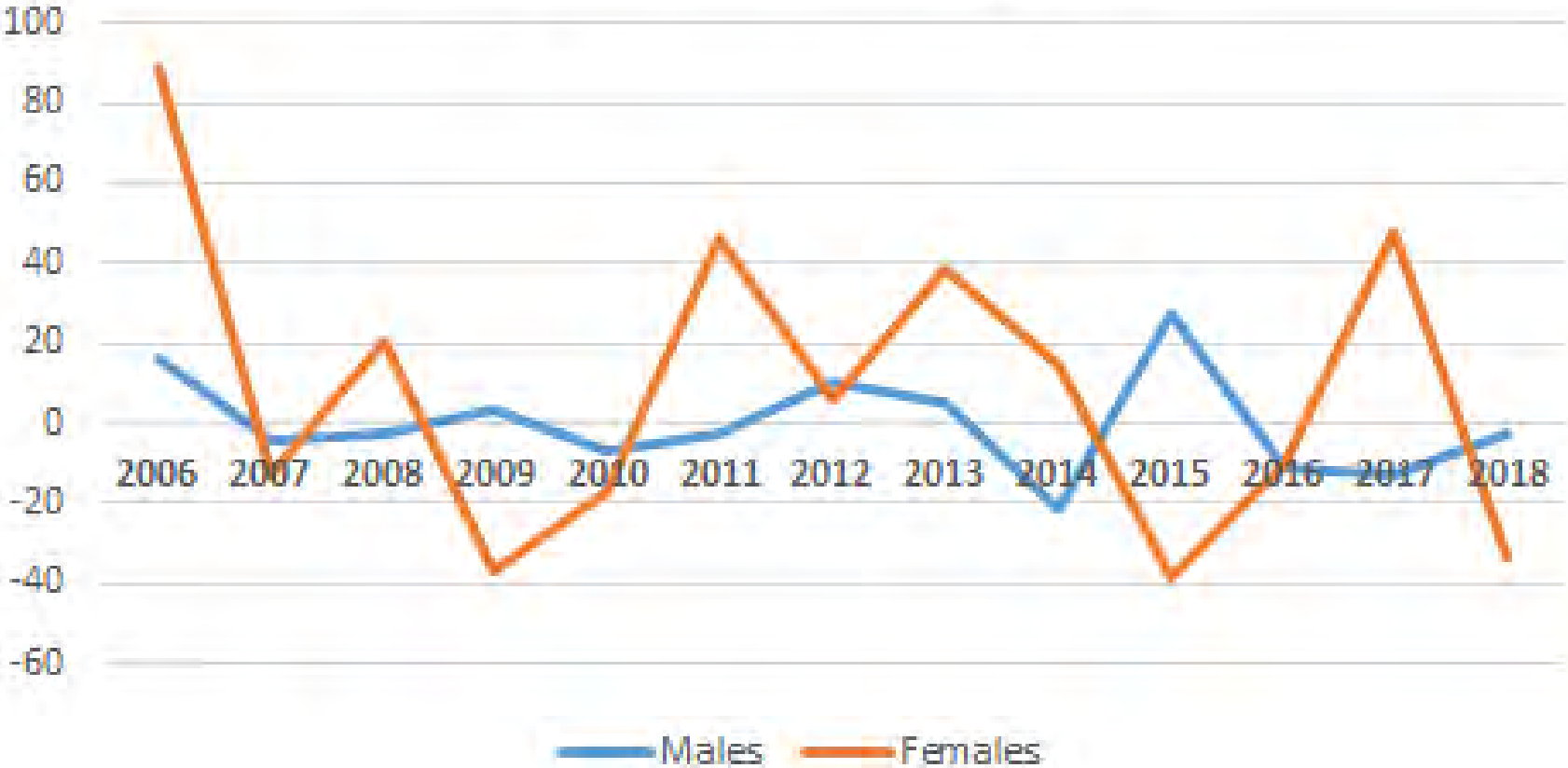
AVIONICS TECHNICIANS

Females



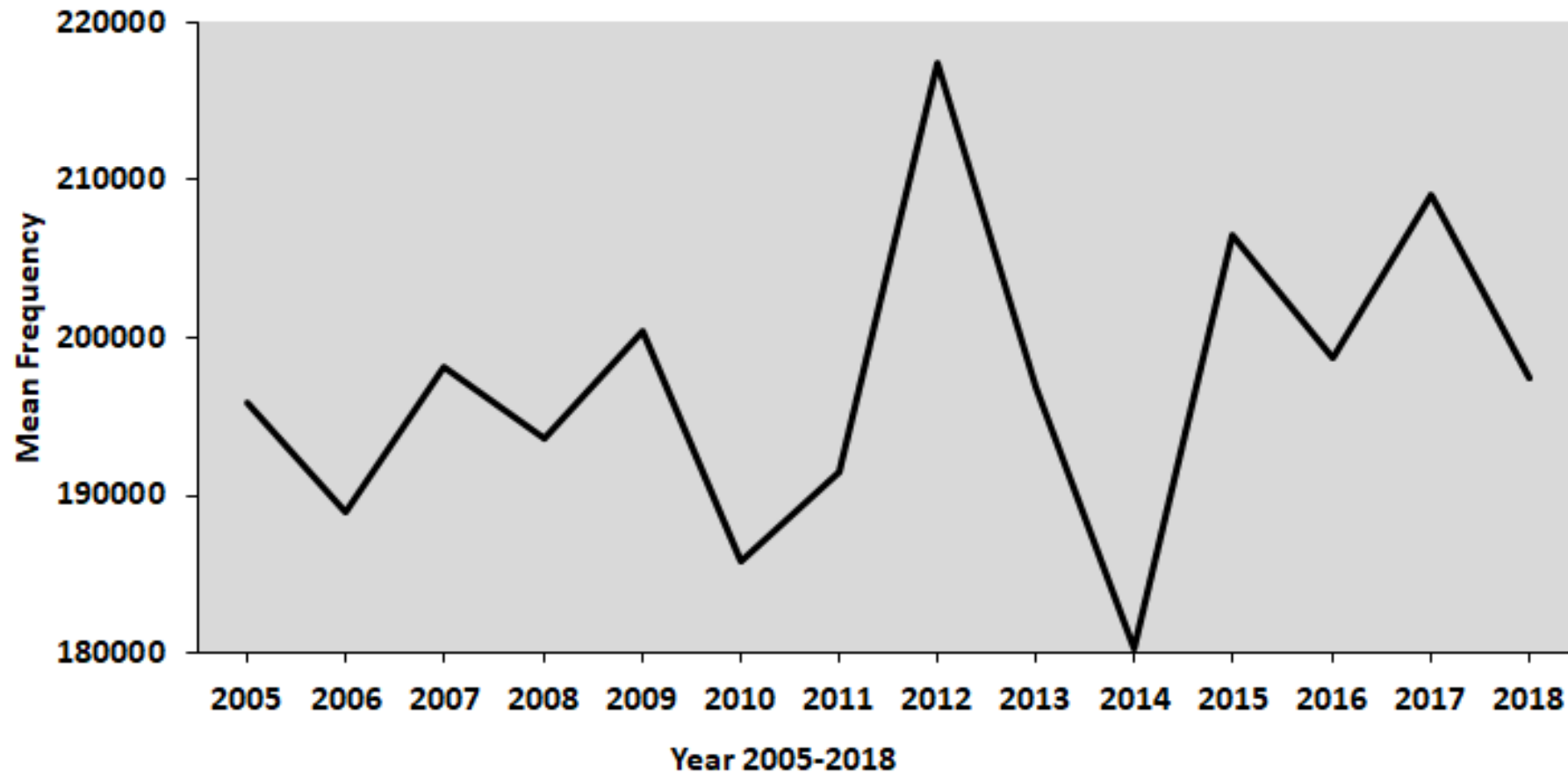
AVIONICS TECHNICIANS

Percent Change



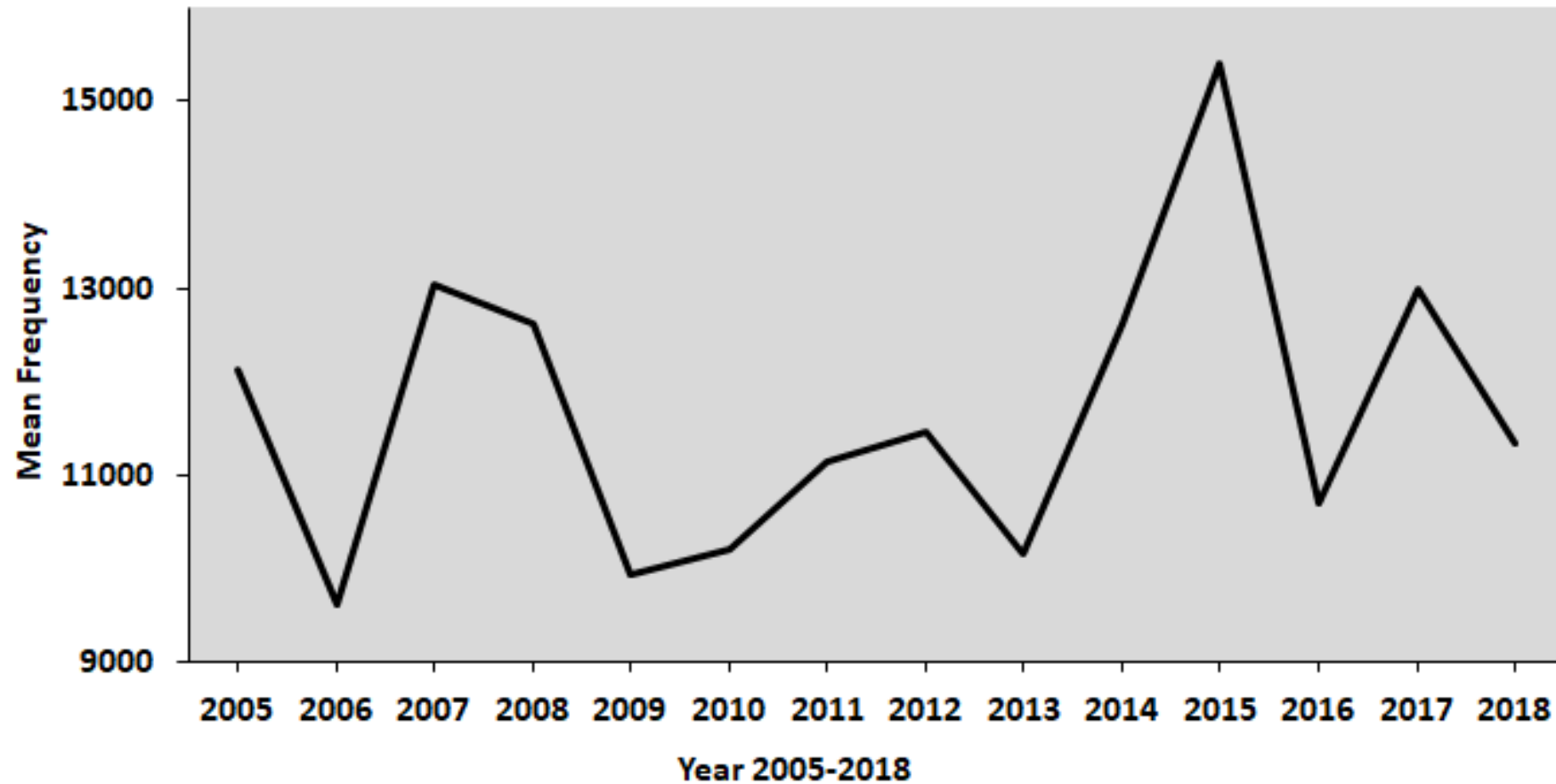
AIRCRAFT MECHANICS AND SERVICE TECHNICIANS

Males



AIRCRAFT MECHANICS AND SERVICE TECHNICIANS

Females



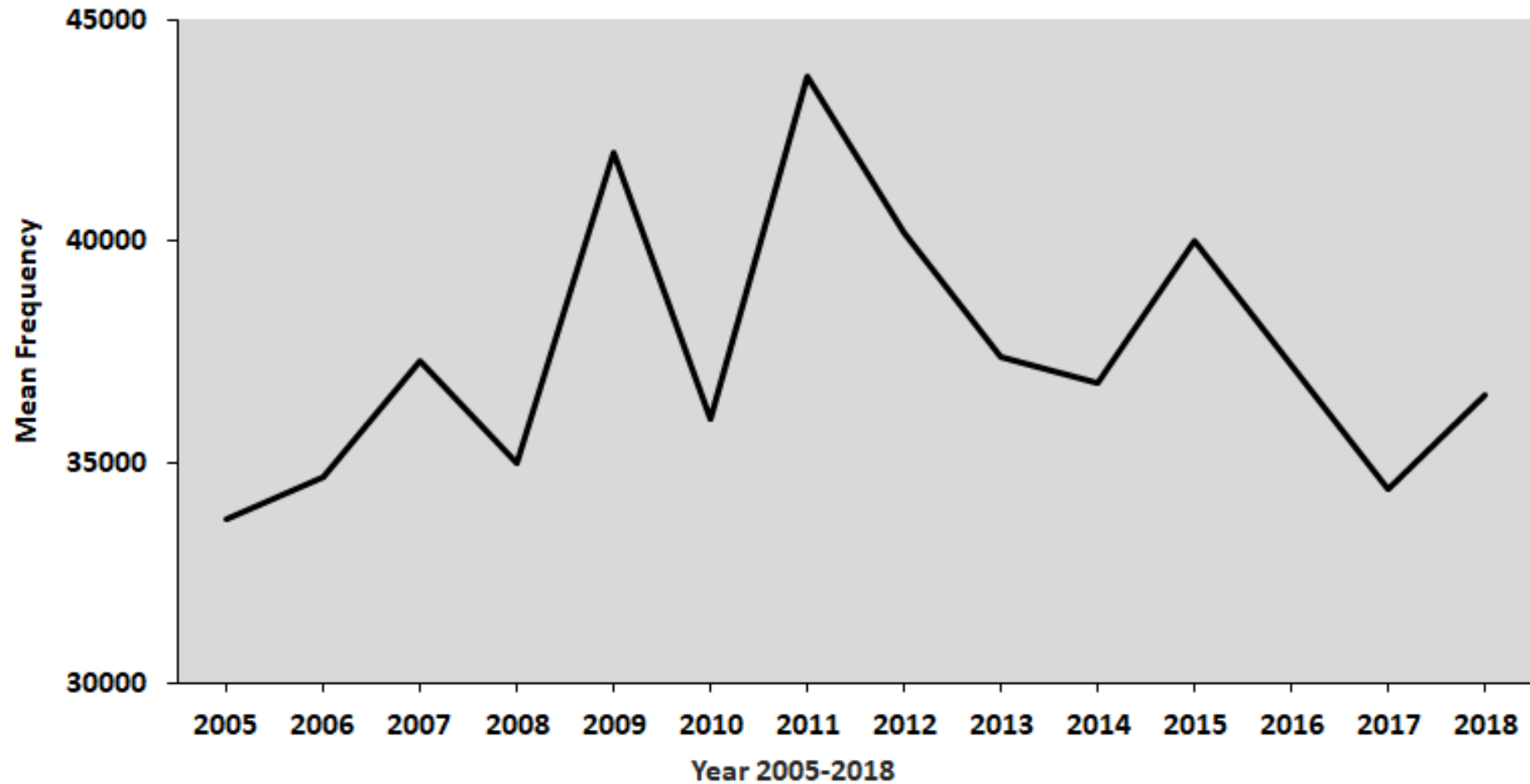
AIRCRAFT MECHANICS AND SERVICE TECHNICIANS

Percent Change



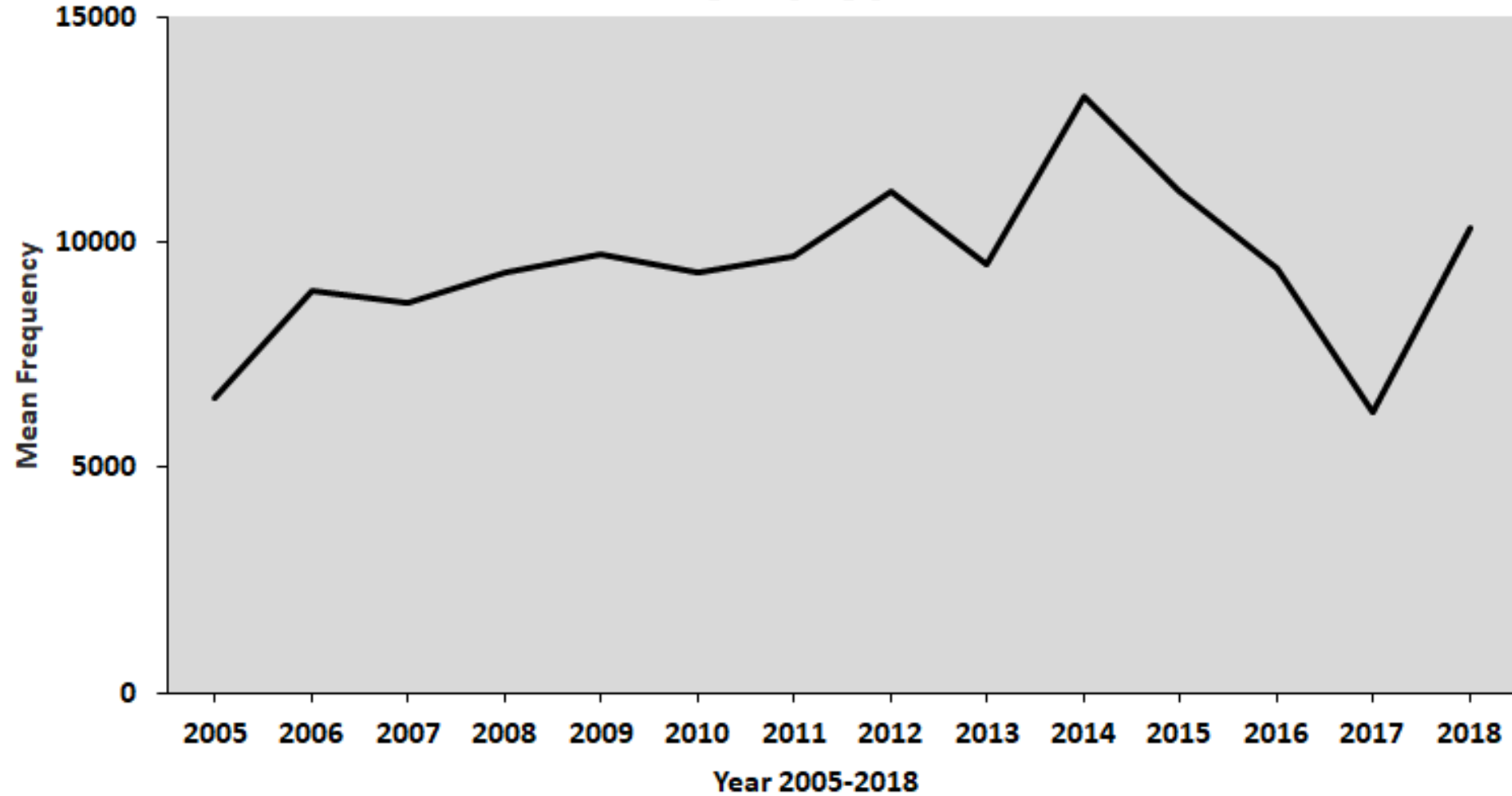
AIR TRAFFIC CONTROLLERS AND AIRFIELD OPERATIONS SPECIALISTS

Males

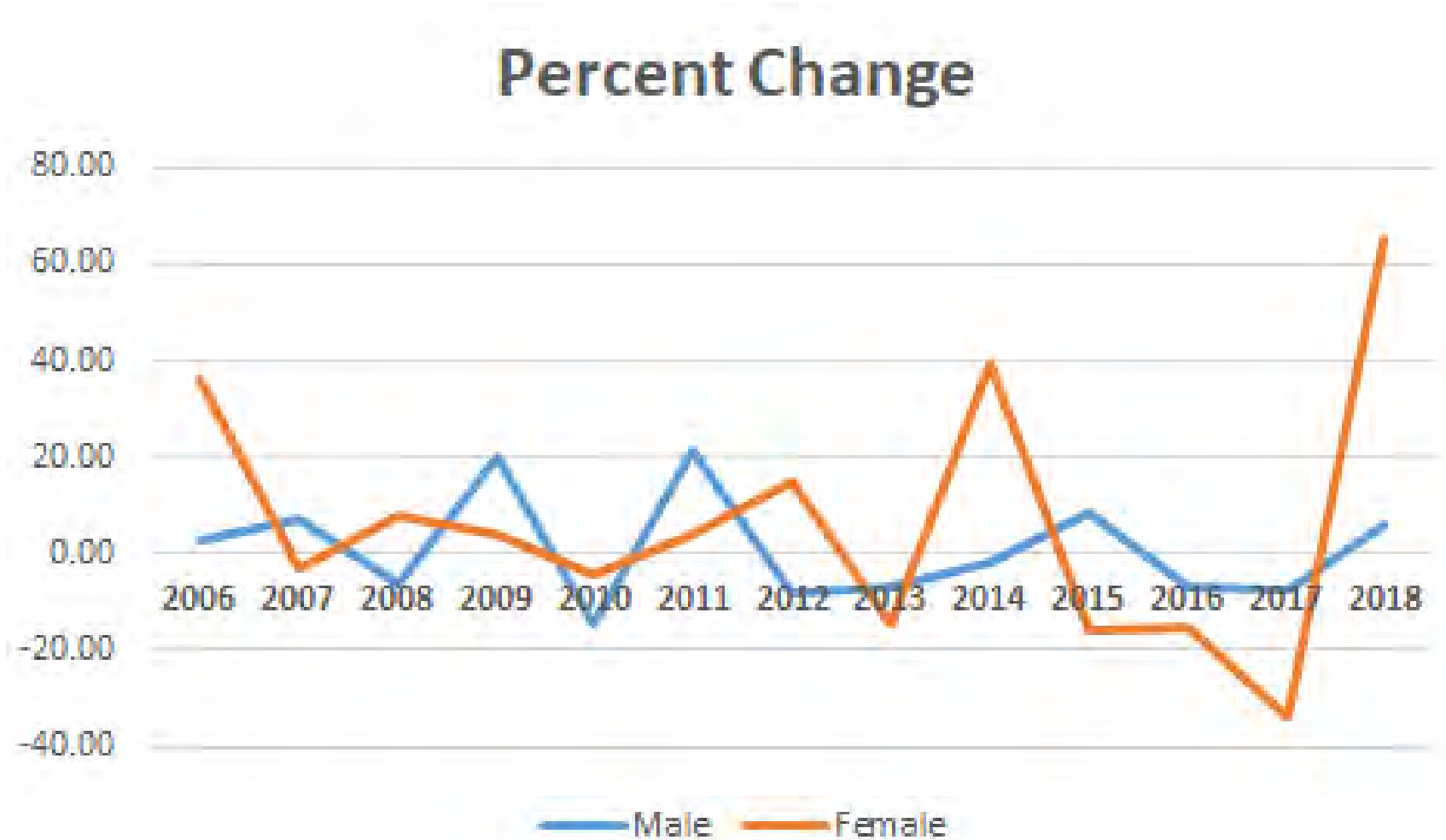


AIR TRAFFIC CONTROLLERS AND AIRFIELD OPERATIONS SPECIALISTS

Females



AIR TRAFFIC CONTROLLERS AND AIRFIELD OPERATIONS SPECIALISTS



Summary

- Females make up a small percentage of the total workforce across aviation occupations
 - Occupations with most females in 2018:
 - Aerospace Engineers: 23,649
 - Aircraft Mechanics and Service Technicians: 15,402
 - Occupations with least females in 2018:
 - Aircraft Structure, Surfaces, Rigging, and Systems Assemblers: 5,514
 - Avionics Technicians: 4,235
- Change across the years has been more erratic for females, compared to males
 - Most erratic over time:
 - Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
 - Avionics Technicians
 - Avionics Technicians

Next Steps: RQ2

- **Approach: Survey Study**
- **Survey Categories**
 - Job Satisfaction
 - Professional Growth Opportunities
 - Challenging Work
 - Non-Monetary Benefits
 - Monetary Benefits
 - Work-Life Balance
 - Management Practices
 - Sexual Harassment / Gender Bias
 - Aviation Passion
- **Status: Data collection ongoing**
- **Findings applied to promote recruitment and retention across aviation occupations**

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Questions?