Occupations in the US

Occupational Outlook Handbook (OOH)

Historical government publications on career guidance featuring hundreds of occupations biennially from 1949 to 2020.

Architecture and Engineering

Aerospace Engineering and **Operations Technicians**

Quick Facts: Aerospace Engineering and Operations Technicians

2018 Median Pav \$67.010 per yea

engineering technology or who have completed vocationaltechnical education in computer programming or robotics and machining. Prospective technicians also may earn certificates or diplomas offered by vocational or technical schools. Some aerospace engineering and operations technicians must have security clearances to work on projects related to national defense.

OOH contains information about occupations such as their employment, job outlook in 10 years, entry

U.S. DEPARTMENT OF LABOR U.S. BUREAU OF LABOR STATISTICS

OCCUPATIONAL OUTLOOK HANDBOOK

2020-2021 EDITION



Part D Education, Training, and Qualifications

Answers for the following questions often can be found in the section [load the section titles related to "Significant PointsSummary" and/or "Education, Training, Apprenticeship, and License, and Advancement;" information could be in more than one section]. If you cannot find the information there, please search the whole document.

D1. What is the most common or *preferred* level of education among workers in this occupation? If more than one preferred education are mentioned, select all that apply.

| Employment Change, 2018-28 | 500 |
|---|-------------------------|
| Job Outlook, 2018-28 | 4% (As fast as average) |
| Number of Jobs, 2018 | 10,500 |
| On-the-job Training | None |
| Work Experience in a Related Occupation | None |
| Typical Entry-Level Education | Associate's degree |
| | \$32.22 per hour |
| | tor,oro per jem |

What Aerospace Engineering and **Operations Technicians Do**

Aerospace engineering and operations technicians operate and maintain equipment used in developing, testing, producing, and sustaining new aircraft and spacecraft.

Work Environment

Aerospace engineering and operations technicians usually work in manufacturing or industrial plants, laboratories, and offices. Some of these workers may be exposed to hazards from equipment or from toxic materials, but incidents are rare as long as proper procedures are followed.

How to Become an Aerospace Engineering and **Operations Technician**

Many employers prefer to hire aerospace engineering and operations technicians who have earned an associate's degree in



Aerospace engineering and operations technicians operate and calibrate computer systems so that they comply with test requirements.

Pay

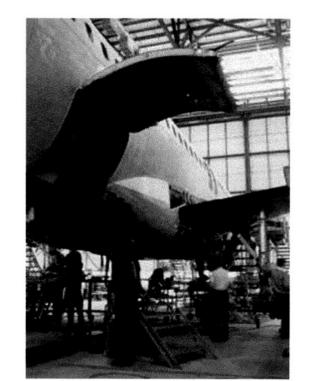
The median annual wage for aerospace engineering and operations technicians was \$67,010 in May 2018.

Job Outlook

Employment of aerospace engineering and operations technicians is projected to grow 4 percent from 2018 to 2028, about as fast as the average for all occupations. Many workers in this occupation work on projects that are related to national defense and therefore require security clearances.

State & Area Data

Explore resources for employment and wages by state and area for aerospace engineering and operations technicians.



Aerospace engineering and operations technicians work to make sure that testing goes smoothly.

qualifications, pay, etc.

Amazon MTurkers will answer questionnaire based on the information they see on the OOH. Each occupation in an OOH was assigned to two turkers.

In the way, we can turn text information into structured quantifiable variables.

- 1) None or below high school
- High school or equivalent
- Postsecondary vocational schools 3)
- Associate degree 4)
- Some college 5)

Part F Earnings and Pay

Answers for the following questions often can be found in the section [load the section titles related to "Earnings;" information could be in more than one section]. If you cannot find the information there, please search the whole document.

F1. According to the text, what is the *median ANNUAL earnings* of *fload the* occupation title]this occupation in [YEAR - system autoload]? Enter either a number or a range. If not mentioned, leave it blank.

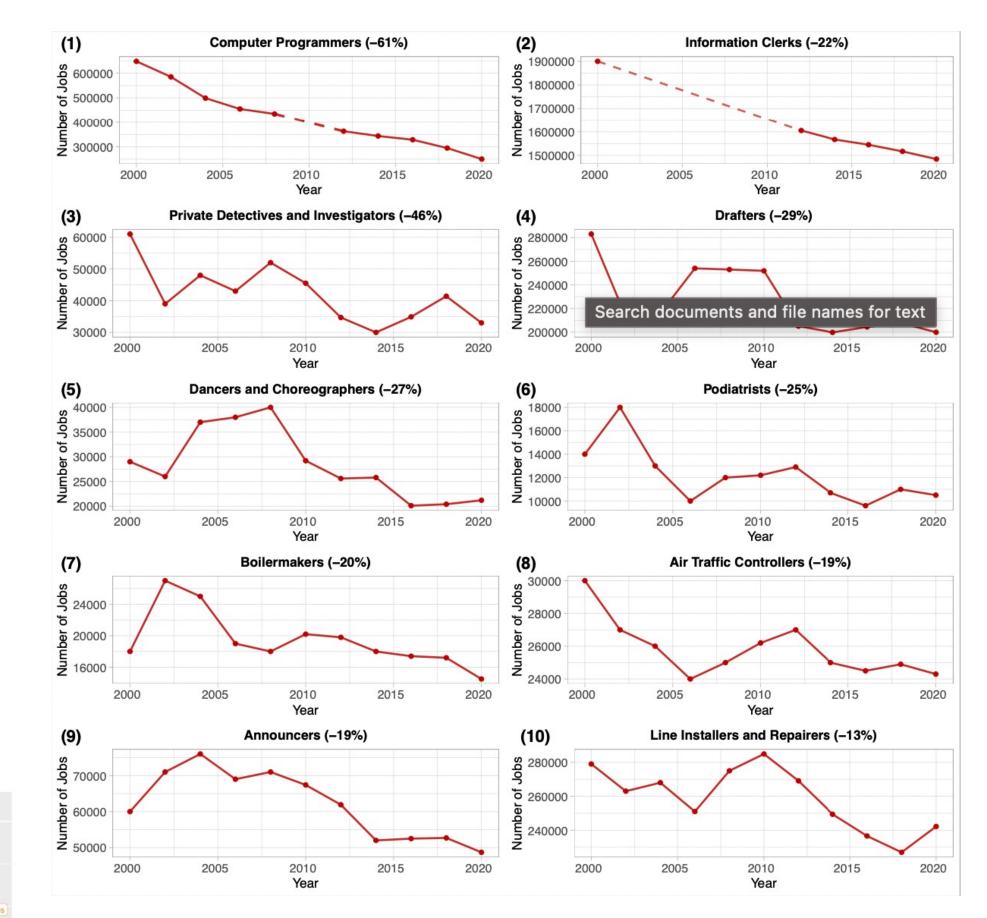
dollars OR dollars to dollars

F1a. What is the *lower 10 percent ANNUAL earnings* of *load the occupation* title]this occupation in [YEAR – system autoload]? Enter either a number or a range. If not mentioned, leave it blank.

dollars OR dollars to dollars

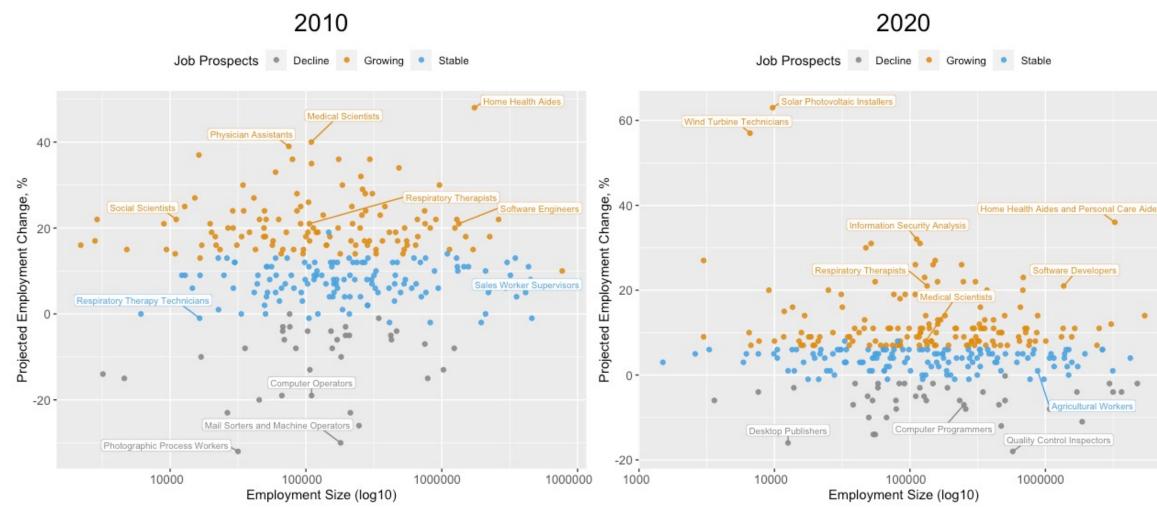
Answers we received from Mturkers were sometimes messy and not accurate. The two turkers who were assigned the same occupation may disagree in some cases. As a result, we had to 1. clean the data to make sure there are formatted consistently; 2. reconcile answers from the turkers that were inconsistent by checking the original documents.

| | | | | | | | | | | | | | | | | | | | | | _ |
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| 2 | 18 | TRUE | FALSE | | 1290600 | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | | FALSE | TRUE | FALSE | FALSE | FALSE | |
| 3 | 18 | TRUE | FALSE | | 155100 | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | | FALSE | TRUE | FALSE | FALSE | FALSE | |
| 4 | 18 | TRUE | FALSE | | 19700 | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | | FALSE | TRUE | FALSE | FALSE | FALSE | |
| 5 | 18 | TRUE | FALSE | | 259400 | FALSE | TRUE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | | FALSE | TRUE | FALSE | FALSE | FALSE | |
| 6 | 18 | TRUE | FALSE | | 166800 | FALSE | TRUE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | | FALSE | TRUE | FALSE | FALSE | FALSE | |
| 7 | 18 | TRUE | FALSE | | 623800 | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | TRUE | FALSE | FALSE | | FALSE | TRUE | FALSE | FALSE | FALSE | |
| 7 8 9 10 11 12 13 | 18 | TRUE | FALSE | | 31000 | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | TRUE | FALSE | FALSE | | FALSE | TRUE | FALSE | FALSE | FALSE | |
| 9 | 18 | TRUE | FALSE | | 16600 | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | | TRUE | FALSE | FALSE | FALSE | FALSE | |
| 10 | 18 | TRUE | FALSE | | 821700 | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | | TRUE | FALSE | TRUE | FALSE | FALSE | |
| 11 | 18 | TRUE | FALSE | | 26200 | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE | FALSE | FALSE | | FALSE | TRUE | FALSE | FALSE | FALSE | |
| 12 | 18 | TRUE | FALSE | | 116000 | FALSE | FALSE | FALSE | TRUE | TRUE | TRUE | TRUE | FALSE | FALSE | | FALSE | TRUE | FALSE | FALSE | FALSE | |
| 13 | 18 | TRUE | FALSE | | 140300 | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | FALSE | FALSE | | FALSE | TRUE | FALSE | FALSE | FALSE | |
| 14 | 18 | TRUE | FALSE | | 220400 | FALSE | TRUE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | | FALSE | TRUE | FALSE | FALSE | FALSE | |
| 15 | 18 | TRUE | FALSE | | 67400 | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | | FALSE | TRUE | FALSE | FALSE | FALSE | |
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| 16 18 | TRUE | FALSE | | 92400 | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE |
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| 17 18 | TRUE | FALSE | | 141200 | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE |
| 18 18 | TRUE | FALSE | | 29100 | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE |
| 19 18 | TRUE | FALSE | | 221900 | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | TRUE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE |
| 20 18 | TRUE | FALSE | | 1950900 | FALSE | TRUE | FALSE | TRUE | FALSE | FALSE | FALSE |
| 21 18 | TRUE | FALSE | | 258100 | FALSE | TRUE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE |
| 22 18 | TRUE | FALSE | | 16300 | FALSE | TRUE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE |
| 23 18 | TRUE | FALSE | | 9400 | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE |
| 24 18 | TRUE | FALSE | | 12800 | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE |
| 25 18 | TRUE | FALSE | | 281300 | FALSE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE |
| 26 18 | TRUE | FALSE | | 185900 | FALSE | TRUE | TRUE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | FALSE |
| 27 18 | TRUE | FALSE | | 763700 | FALSE | TRUE | TRUE | FALSE | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE | FALSE |
| 28 18 | TRUE | FALSE | | 821900 | FALSE | FALSE | TRUE | FALSE | TRUE | FALSE | FALSE | FALSE |
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| 30 18 | TRUE | FALSE | | 528800 | FALSE | TRUE | FALSE | TRUE | FALSE | FALSE | FALSE |
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| - - | 2010_ | Cleaning | original data | + | | | | | | | | | | | | | | |
| Ready | / | | | | | | | | | | | | | | | 巴 | | + 110% |

After data cleaning, we continued to help with data analysis and visualization by producing graphs with ggplot2.



Top 10 occupations with most contractions

PURM funded August Fu Summer 2022