Aviation critical essay

What is a critical essay?
Critical essays are used in Aviation to discuss or evaluate:

- key concepts or models
- trends or developments

You may be asked to provide recommendations based on your critical discussion or evaluation.

Structure of an essay

**Introduction**
- Introduce topic/context
- State main idea/thesis
- Outline main points

**Body Paragraphs**
- Topic sentence
- Explanation
- Evidence
- Example
- Concluding sentence

**Conclusion**
- Restate argument/main idea

**Recommendations**
Sample introduction 1

- The introduction moves from broad to specific details.
- The length of your introduction will depend on the word requirement of your essay (usually 10%).

Example assignment task: Critically discuss a recent development in the Australian aviation industry in relation to one of the topics provided.

<table>
<thead>
<tr>
<th>Context</th>
<th>Thesis statement/main idea/position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recently important changes have been made to fire service management practices in the Australian aviation industry. Workplace accidents are a reminder that safety and efficiency are reliant upon the effective teamwork of aviation rescue fire fighters. Effective teamwork, in turn, is dependent on the level of job satisfaction felt by rescue fire fighters. This paper critically discusses the relationship between job satisfaction and team interaction, focusing particularly on leadership behaviour, and the implications of these two factors for workplace safety in aviation fire services in Australia.</td>
<td></td>
</tr>
<tr>
<td>Outline of essay</td>
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</table>

(Adapted from Bartolo & Furlonger 2000, p. 87)

Developing your thesis statement

1. Consider what the task requires you to do
2. Choose your topic
3. Read credible, academic sources
4. Choose an aspect of that topic
5. Assert your position in relation to this aspect

Example assignment task: Discuss a recent development in the Australian aviation industry in relation to one of the topics provided.

Topic = aviation safety
Aspect = aviation rescue fire fighters
Focus = decreasing workplace accidents experienced by aviation rescue fire fighters
Position = increased job satisfaction of fire fighters and effective teamwork reduce workplace accidents

Thesis statement = Workplace accidents are a reminder that safety and efficiency are reliant upon the effective teamwork of aviation rescue fire fighters. Effective teamwork, in turn, is dependent on the level of job satisfaction felt by rescue fire fighters.
Sample introduction 2

Example assignment task: Write an essay of approx. 1000 words critically discussing a contemporary aviation issue. In discussing the topic, you also need to clearly explain how the topic is relevant to you and your future career in aviation.

| To compete with their low cost competitors, many airlines, such as British Airways, have created their own low cost subsidiaries. As a result, in order to remain competitive, these subsidiaries have created low cost employment systems and human resource management policies, which may be different from the parent company. As a future manager in the Australian aviation industry, this is an important topic as Australian carriers face increased competition and price pressures. This essay discusses the impact of competition and pricing on management practices and employment relations. It begins with an overview of low cost subsidiaries and how and why they have come into being. The essay then compares management practices of low cost operators and their parent companies, including a discussion on flight crew attitudes. |
|---|---|
| Context |
| Thesis statement/main idea/position |
| Outline of essay |

(Adapted from Harvey & Turnbull 2000, p. 330.)

Sample introduction 2

Example assignment task: Critically discuss the contributions the Reason Model has made to the aviation industry.

| Aviation safety is of paramount concern to the industry and has grabbed international attention recently due to a number of high profile aviation incidents. James Reason’s theoretical model, also known as the ‘Swiss cheese model’, has become a template for understanding incidents and accidents. The model illustrates how accidents occur in organizations, focusing on both organizational hierarchy and human error. However, while the Reason model has had a positive effect on way the industry manages safety, it has also lead to overzealous implementations. This essay critically examines the contributions the model has made to the aviation industry. It begins with an overview of the model and then discusses its several advantages and disadvantages, drawing upon other similar models as points of comparison. |
|---|---|
| Context |
| Thesis statement/main idea/position |
| Outline of essay |
Body paragraphs

- **MUST** follow the outline of the essay presented in the introduction
- Paragraphs are very structured and typically include the following elements:
  
  - **Topic sentence**
    - Tells the reader the main idea of the paragraph
    - One main idea = one paragraph
  
  - **Explain & support**
    - Use your readings to explain & support your discussion
    - Use in-text references to acknowledge sources of information

  - **Concluding sentence**
    - Summarise the main idea: This is the ‘So what?’ or ‘What does this all mean?’ statement
    - Link to the next paragraph or idea

**Sample body paragraph 1**

<table>
<thead>
<tr>
<th>Job satisfaction has considerable implications for employees’ psychological and physical wellbeing, and is therefore a key consideration in the development of management practices in the aviation industry. The Job Descriptive Index (JDI) is a measure of job satisfaction (Smith et al., 1969). ..... In a recent study involving aviation firefighters the JDI was used to measure the satisfaction with supervision and co-worker (Bartolo &amp; Furlonger, 2000). The results suggest that job satisfaction correlates with both supervisor leadership behaviour and firefighters’ satisfaction with co-workers. ..... This indicates the need for team supervisors to be trained not only in leadership behaviours, but also how to promote effective teamwork.</th>
<th>Topic sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain &amp; support</td>
<td>Concluding sentence</td>
</tr>
</tbody>
</table>

(Adapted from Bartolo & Furlonger 2000, p. 87)
Sample body paragraph 2

| Scheduled passenger airline service has become very safe. With one passenger fatality per 7.1 million air travellers, 2011 was the safest year on record for commercial aviation worldwide (Michaels & Pasztor 2011). The International Air Transport Association reported that the global airline accident rate was one accident for every 1.6 million flights, a 42 percent improvement since 2000 (Hersman 2011). The improvement in safety during flight has led to increased attention to on-ground risks in the industry as the quest for improving commercial aviation continues (Pasztor 2011). This suggests a need to examine more closely the hazards that occur before take-off and after landing. |
|---|---|---|
| Topic sentence | Explain & support | Concluding sentence |

(Adapted from Oster, Strong & Zorn 2012, pp. 148-164)

Sample conclusion

- Restate the focus of the essay.
- Summarise the main points or findings presented in the body of your essay.
- Finish with a concluding observation or comment.
- The length of your conclusion will depend on the word requirement of your essay (usually 10%).

| Sleep inertia played a significant role in the crash of Air India Express Flight IX-812 at Mangalore in India on May 22nd 2010. Studies of human factors in aviation have shown that a variety of factors influence the severity and duration of sleep inertia. These factors include depth of sleep, timing of sleep and chemical influences. If a crew member is awakened from a deep sleep, then it is likely their reaction time performance will be adversely affected. This appeared to be the case for Air India Express Flight IX-812 where the Captain was in a long sleep during the flight. As a result, upon awakening, the Captain’s judgment appeared to have been impaired, resulting in a series of poor decisions. The accident highlights the need for an effective Fatigue Risk Management System (FRMS) and a Crew Resource Management (CRM) system, along with focused training to ensure crew are fully aware of the impact of sleep inertia on performance, particularly decision making. |
|---|---|---|
| Restated focus/ purpose of essay | Sum up main points or findings from the body of the essay | Concluding observation |

(Adapted from Government of India Ministry of Civil Aviation 2010)
Read and use credible, scholarly sources of information

- Scholarly sources include journals, textbooks and government reports.
- These have been refereed, peer-reviewed or have gone through a rigorous editorial process.
- In aviation, reports from governing bodies such as CASA or FAA are also considered appropriate.

**Young Aviators** (monthly magazine)

**A fictional story on your topic**

**A Wikipedia entry (source unknown)**

**A television news story on your topic**

**An aeronautical engineering blog**

**An aviation website (unless by a governing body such as CASA or FAA)**

**An aviation journal** (refereed)

**The University of New York website**

**Wiener, EL & Nagel, DC 2012, Human factors in aviation, Academic Press, San Diego.**

**A peer reviewed conference paper at the Research in Higher Education conference**

**An Australian Government report on your topic**

Why reference?

- Avoids plagiarism & maintains academic integrity
- Shows exactly where the information comes from
- Strengthens your argument or provides evidence to support your position

When to reference?

- Paraphrasing the words and ideas of others
- Summarising the words and ideas of others
- Quoting the words of others
- Copying the data, graphs, images and tables of others
- Mentioning the ideas or work of others (unless it is considered general knowledge)

How to reference?

1) Include in-text references which provide:
- Author’s surname or family name
- Year of publication
- Page number (when quoting, using data, graphs, tables and images from a specific page or pages)

2) Include a reference list which provides full bibliographic details of sources referenced in your report
Additional resources:

- For resources on referencing (including UniSA Harvard and APA referencing styles) and academic integrity, go to UniSA’s referencing website.
- To understand more about finding and choosing scholarly sources, check out the UniSA library’s training videos on the library’s website.

References


