

Aviation Water Pollution Case Analysis

by Kinyuajui Parti

General metrics

5,139

characters

749

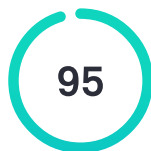
words

57

sentences

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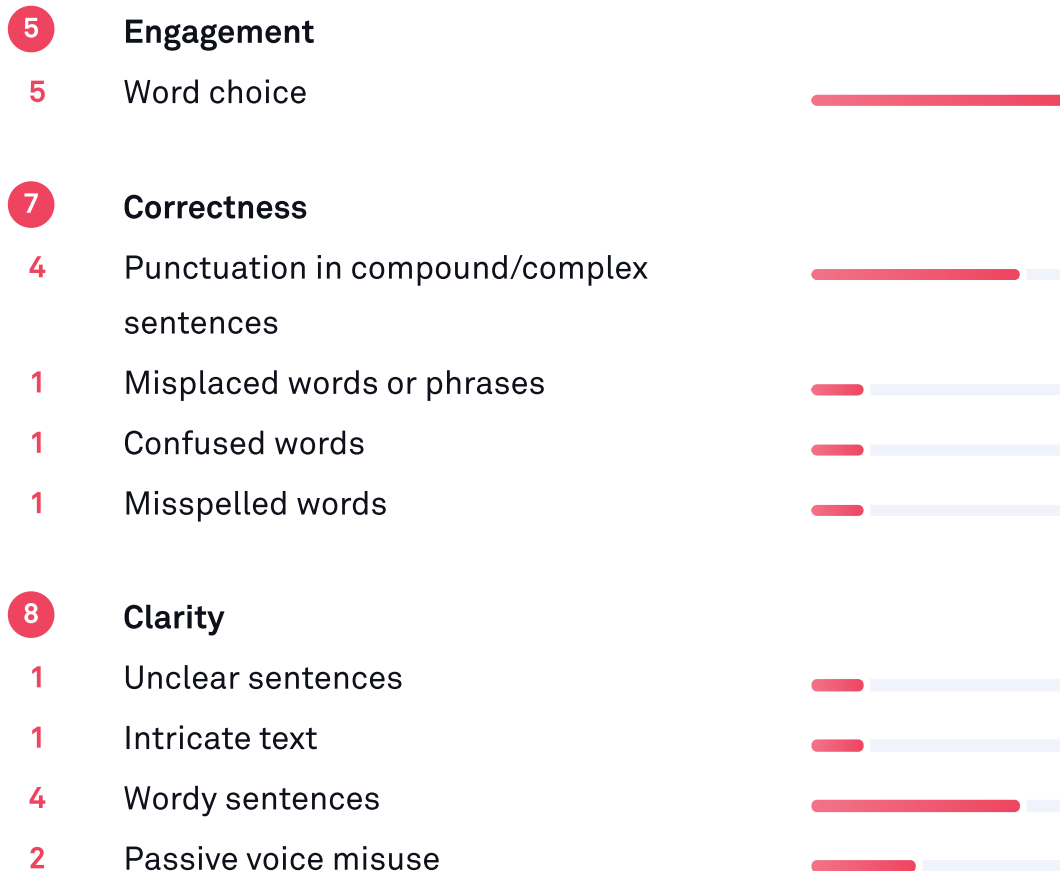
18Advanced

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Writing Issues



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39%

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unique words

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Measures depth of vocabulary by identifying words that are not among the 5,000 most common English words.

rare words

Word Length

Measures average word length

5.4

characters per word

Sentence Length

Measures average sentence length

13.1

words per sentence

Aviation Water Pollution Case Analysis

4

Case Analysis: Aviation Water Pollution

Student's Name

Department, University Name

Course Code: Course Name

Instructor's Name

Date of Submission

Case Analysis: Aviation and Water Pollution

Case Summary

The aviation industry has a significant impact on the environment. Aviation activities such as normal¹ maintenance and development of crafts use water and significantly lower the water quality (Sahani, 2020). Aviation processes lead to air pollution that results in water pollution when the emitted gases combine with atmospheric elements such as vapour to form toxic compounds that pollute water on the surface of the earth when it rains (Baxter, Srisaeng & Wild, 2019). Water pollution threatens marine life. Therefore, there is a need to control water pollution. But treating water used to clean planes and going fully electric can reduce water pollution emanating from the aviation industry.

Case Problem

Water pollution is a menace for the world today. Water supports both marine and terrestrial life, and therefore, its pollution endangers the human race, animals and marine life. The aviation industry contributes significantly to the pollution of water. The burning of combustible fuels by plane engines produces carbon monoxide, nitrogen oxide, and other sulfur gases (Sahani, 2020). These gases dissolve in the atmospheric moisture and later condense, forming harmful precipitation that pollutes water bodies on the earth's surface (Davis & Ternieden, 2005). Water use in cleaning aircraft uses toxic solvents which, when streamed into water bodies such as lakes and rivers, cause contamination. Moreover, water use for aircraft de-icing contaminates water, thus rendering it unsafe for human, plant, and animal consumption (Baxter, Srisaeng & Wild, 2019). Therefore, the aviation industry contributes significantly to water pollution ² and there is a great need to solve this environmental problem.

Significance of the Problem

Water pollution has a massive impact on the environment considering the significant role water plays in the life of organisms. Contamination of water reduces the availability and supply of safe water for industrial, agricultural and domestic use. Water pollution also reduces the safety and quality of water on the earth's surface (Davis & Ternieden, 2005). Aquatic life such as fish and plants ³ and other marine animals die when water is polluted, leading to a ⁴ reduction in their population. A decrease in fish and other marine life populations creates food shortages for human beings and animals. Water pollution also translates to increased diseases for humans, animals and plants. Diseases ⁵ arising from water contamination ⁶ such as typhoid and helicobacter pylori ⁷ are expensive to treat, which puts many people in difficult situations (Keller & Borwick, 2021). Governments spend a lot of money trying to prevent

and treat citizens and water bodies. ⁸ This results in additional expenditures that consume funds that would otherwise be used in other development projects.

Alternative Action and Recommendations

⁹ To reduce aviation water pollution, ¹⁰ aeroplanes are to be fitted with chimneys that absorb toxic chemicals to curb their emission of harmful gases into the atmosphere. ¹¹ The fuels should be treated to reduce carbon emissions. ¹² In fact, if I were in a position to resolve the water pollution situation, I would recommend that every aircraft is fitted with neutralizers in their combustions components to ensure that the gas released after combustion of the fuel is filtered to ¹³ release ¹⁴ only the friendly elements to the atmosphere and the harmful ¹⁵ one to be recycled. There is a great need to ensure that aeroplanes go entirely electric to eliminate the necessity of burning fuels (Sahani, 2020). Developers should ¹⁶ think of developing self-charging engines that can be started using ¹⁷ fuel but then run on their ¹⁸ own electrical energy generated from their rotation. This technology is currently being used by motor companies such as Tesla and can be applied to the aviation industry in manufacturing electric planes. Just as Baxter, Srisaeng & Wild (2019) state, ¹⁹ craft developers should be compelled to treat any water they use in cleaning equipment and ²⁰ aircrafts before releasing them to the grown or into rivers.

References

Davis, R. S., & Ternieden, C. H. (2005, December 31). Critical issues in aviation and the Environment: Water Quality. Transportation Research Circular. Retrieved October 21, 2021, from <https://trid.trb.org/view/775332>.
Baxter, G., Srisaeng, P., & Wild, G. (2019, July 29). An assessment of airport sustainability: Part 3-water management at Copenhagen Airport. MDPI.

Retrieved October 21, 2021, from <https://www.mdpi.com/2079-9276/8/3/135/htm>.

Sahani, K. (2020, November 4). Aviation pollution and environmental issues. The Daily Guardian. Retrieved October 21, 2021, from <https://theguardian.com/aviation-pollution-and-environmental-issues/>.

Keller, A., & Borwick, K. (2021, September 21). Water contamination: Health risks and safe remedies. ConsumerNotice.org. Retrieved October 21, 2021, from <https://www.consumernotice.org/environmental/water-contamination/>.

1.	normal → routine, regular, standard, ordinary	Word choice	Engagement
2.	, and	Punctuation in compound/complex sentences	Correctness
3.	, and	Punctuation in compound/complex sentences	Correctness
4.	<i>Aquatic life such as fish and plants and other marine animals die when water is polluted, leading to a reduction in their population.</i>	Unclear sentences	Clarity
5.	Diseases → Conditions, Infections	Word choice	Engagement
6.	, such	Punctuation in compound/complex sentences	Correctness
7.	pylori,	Punctuation in compound/complex sentences	Correctness
8.	<i>This</i>	Intricate text	Clarity
9.	<i>To reduce aviation water pollution</i>	Misplaced words or phrases	Correctness
10.	to be	Wordy sentences	Clarity
11.	<i>The fuels should be treated</i>	Passive voice misuse	Clarity
12.	In fact, if	Wordy sentences	Clarity
13.	release → remove	Word choice	Engagement
14.	friendly → social, familiar	Word choice	Engagement
15.	one → ones	Confused words	Correctness
16.	think of developing →	Wordy sentences	Clarity

develop

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- | | | | |
|-----|---|----------------------|-------------|
| 17. | fuel → power | Word choice | Engagement |
| 18. | own | Wordy sentences | Clarity |
| 19. | <i>craft developers should be compelled</i> | Passive voice misuse | Clarity |
| 20. | airerafts → aircraft | Misspelled words | Correctness |
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