

Medical sciences/Aerospace



Authority: voice control

Rickards, Caroline (2004). *The effect of repetitive baroreflex stimulation on orthostatic responses*. PhD Thesis, School of Medical Sciences, RMIT University.

Rickards sets out the problem: the impacts of G-force acceleration on jetfighter pilots. She intends to justify her research and offer a solution.

1. Notice how the first and last sentences are in Rickard's own voice. There are no citations. In sentence 1, she poses a problem. In the last sentence she explains why the consequences of this problem are unacceptable.
2. Underline two linking words that explain the relationships between points of evidence. These linking words contribute to a strong voice.
3. Rickards has used an abbreviation for 'seconds' – this appears to be acceptable within her specific discourse.
4. The referencing system used here is an endnote system. See the numbers in brackets.

1.4.2 G-Induced Loss of Conscious (G-LOC)

Regardless of the preceding Gz exposures, the point of human tolerance to +Gz acceleration is reached when at a given +Gz load, the cardiovascular system can no longer compensate for the reduction in arterial blood pressure, and so is unable to maintain cerebral perfusion, resulting in G-LOC. The actual incapacitation time of G-LOC can be up to 20 sec (268-270). Furthermore, the relative incapacitation time once a pilot regains consciousness can be up to 15 sec, during which time pilots can be amnesic, confused, disoriented and unable to adequately operate the aircraft controls (83, 109, 268-270). Hence the total time elapsed from the initial loss of consciousness to when the pilot can usefully regain control of the aircraft can be up to 30-35 sec (109, 268-270). Obviously loss of consciousness whilst flying a high performance aircraft at high speeds, often very close to the ground, has potentially catastrophic consequences for both the pilot and airframe.

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Answer Key

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KEY

1. Rickard sets up a problem in sentence 1. She explains why the problem must be solved.
2. Linking words: furthermore (connects two pieces of evidence); hence (summarises the evidence – gives the total effect) \
3. Rickards uses sec for seconds. Is this style of abbreviation acceptable in your field? Under what circumstances?
4. The endnote system of referencing numbers citations according to their relative position in the text. Number 1 is the first source referred to. All references are then listed according to number at the end of the text. Note how Rickards repeats references to accompany each piece of evidence.