Communications and Transport Systems Department of Science and Technology Linköping University

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## TNFL03 - fallstudier inom flygtrafik och logistik

## Homework Set 5, 13.03.2017

**Exercise 1 (Rewrite):** Major differences in the reaction times of the two study subjects were found.

**Exercise 2** (Rewrite): Since 1990, NASA spending has been flat. In addition, some funds that once were earmarked for space programs will instead be shifted into aeronautical projects.

**Exercise 3 (Rewrite):** The economies of scale necessary for success in today's commercial market compel manufacturers to take an international approach. This is due to the fact that an enormous amount of capital is required to cover the development and tooling costs associated with a new aircraft program.

**Exercise 4 (Rewrite):** There are few industries in existence where one can go to sleep at night and wake up the next morning faced with challenges that did not exist the day prior.

**Exercise 5** (Cut the clutter: Rewrite): The effect of a slight change in departure time on passenger buying behavior creates a powerful incentive for carriers to increase flight frequency, even when there are plenty of seats available on existing flights.

**Exercise 6** (Cut the clutter: Rewrite): The reason temperatures have increased recently is that a low-pressure system has stalled off the coast.

**Exercise 7** (Cut the clutter: Rewrite): Why is the origin of the Earth's axis system located at the center of mass of an airplane when modeling an

airplane, considering the fact that the Earth's axis system should be motionless and inertial?

**Exercise 8 (Cut the clutter: Rewrite):** It is well known that during the last three winter seasons at least one airplane crash with many damaged and killed is reported in the USA and Canada each winter.

## Exercise 9 (Punctuation):

Check the punctuation in the examples below, rewrite the sentences if necessary.

- (a) The proposal to shut down half of the country's airports has caused an outcry, angry letters have been pouring into the administration.
- (b) Between 1969 and 1978, fuel costs rose 222 percent (to 20 percent of operating expenses), inflation boosted labor costs (to 45 percent of operating expenses), and the stagnation of the gross national product curtailed demand growth (from 18 percent to 4 percent per annum).
- (c) The chief executive officer of engineering and maintenance (E & M) is the senior vicepresident, whose responsibilities are as broad as the mission of this administration; to keep the companys equipment in condition to provide safe and salable air transportation.

Explain the difference between

(d) A woman-hating religion and a woman hating religion.

## Exercise 10 (Rewrite the paragraph):

The churchs record-keeping system and its high level of accuracy has been previously reported (2). Briefly, the church creates and maintains a church record for each individual who is baptized into the church. These records are created at the congregation level at the time of baptism and then forwarded to the general church level where the membership record is added to the church membership database. These records contain minimal information including name, date of birth, parents names, dates of church ordinances, and current address. Each congregation has a lay membership clerk who is responsible for updating the membership records for the members of the congregation. Such updates would include dates of ordinances received after baptism (e.g., priesthood ordination or marriage), name of spouse when a member marries, change of current address and date of death.