## Communications and Transport Systems Department of Science and Technology Linköping University

Spring 2016

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# TNFL03 - fallstudier inom flygtrafik och logistik

### Homework Set 4, 23.02.2016

#### BUGS in writing and spelling

Solutions are due Tuesday, March 1.

#### Exercise 1 ("Spelling"):

Check the sentences and rewrite if necessary:

- (a) There is fewer pollution in the air, but there are less particles of dust.
- (b) Guests may easily assume that the plane their boarding is fully owned by their host.
- (c) Who's money is on the table?
- (d) There are many ways to determine the type of aircraft being used on you're next flight.
- (e) A bomb-proof lining made from multiple layers of fabrics and composites is tested to prove it could contain the force of an explosion in the luggage hold of an aircraft.
- (f) All of the propeller effects will vary with the speed of the aircraft because at some high power setting, greater thrust exists at lower speeds (remember an aircraft accelerates until thrust equals drag and an aircraft in equilibrium has no excess thrust until power is increased).
- (g) For an airplane with a propeller that spins clockwise as viewed form the rear, the moments cause a left yaw.

#### Exercise 2 ("BUGS"):

Can you spot any "BUGS"? Please correct them.

(a) Henry never slept, so that he was occasionally tired.

- (b) Wind tunnel research on conventional single-engine aircraft indicate, that about 6/7 of the total yawing moment is produced by the spiraling slipstream and the rest is from asymmetrical thrust.
- (c) We have established the Ascend Aircraft Investment Index (AAII) as a dedicated solution to benchmark the rewards and risks of aircraft leasing against those of other industries. We will also discuss the low correlation between returns from aircraft leasing and the general economy or the performance of other indices, and its causes.
- (d) Then President-elect Barack Obama said that every one was proud of Sullenberger's "heroic and graceful job in landing the damaged aircraft".
- (e) Computerized reservation systems/global distribution systems (CRS's/GDS's) display airline schedules and prices for use by agents in making reservations.
- (f) The pilot checked if it rained.
- (g) A worm can literally bring the Internet to its knees.