Re: 204 Black Maria Ground School Exam

Dear Cadets,

As the scholarship exam approaches in mid-January, I encourage you to increase your review and studying of the ground school material. Below I have given a summary of the material you will need to know for the exam and an amended schedule with prep requirements for our upcoming classes. I have also listed a few resources and recommendations to ensure your success in studying.

**Upcoming Classes**

Below is some information about our upcoming classes and the information we will be covering. Some of the material we will be covering has been shuffled around. For class on December 12th please ensure you are familiar with the phonetic alphabet and phonetic numbers, as we will not review this information in class. For class on December 5th, please review the following <https://www.wikihow.com/Read-an-Aviation-Routine-Weather-Report-(METAR)>.

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|  | November 21st | Atmosphere, Clouds, Pressure, Precipitation |
|  | November 28th | Winds, Humidity, Air Masses, Fronts, Airmanship |
|  | December 5th | Interpreting Meteorological Reports, Navigation and Navigation Aids |
|  | December 9th (Saturday, for cadets writing the exam only, timings and location to be announced over email) | Review & Practice Exam |
|  | December 12th | Radio, Weight and Balance, Practice Exam |
|  | January 6th (Saturday, for cadets writing the exam only, timings and location to be announced over email) | Review & Practice Exam |
|  | January 9th | Review, Practice Exam |

**Testable Information**

Below is the information that may be tested in the exam. Some of the information has not been covered yet, but we will go over it in the upcoming classes.

**Part I: AIRCRAFT OPERATIONS**

The Airplane: All information in this section Theory of Flight: All information in this section Aero Engines: For Power Pilot scholarship only. No questions about jet propulsion.

**Part II: AIR LAW**

Aerodrome: All information in this section Rules of the Air: “Right of Way” & “Rules of the Air” sections only

**Part III: METEOROLOGY**

Questions relating to weather reports and forecasts will be based on the ICAO, METAR, and TAF aviation weather codes which came into effect in Canada 01 June 1996.

**Part IV: NAVIGATION**

No questions on the astro-compass, finding the sun’s true bearing and preparing the map for flight. Navigation questions requiring the use of maps, flight plans, and the physical measurement of distance will not be asked in the exam. The basic understanding of navigation will be evaluated using the application of variations, deviation, and the “1 in 60” rule, etc. Candidates for the Power Pilot Scholarship should expect to answer questions requiring the use of manual flight computers to compute track, heading, airspeed etc. No questions will be asked on the advanced usage of the flight computer such as the calculation of radius of action, the point of no return, the critical point, climb and descent, airspeed and altitude corrections; and No questions will be asked on radio navigation.

**Part V: GENERAL AIRMANSHIP**

Only questions pertaining to wake turbulence, wind shear and ground effect will be asked.

**Studying Recommendations for the Exam**

* Below are some useful resources to study for the exam. You can decide what works best for you:
  + <https://www.204blackmaria.ca/ground-school.html> (Here you can find a free PDF version of all the information necessary for the exam.)
  + From the Ground Up Canadian Edition (This is a basic aviation text, which covers many of the items tested on the exam.)
  + <https://drive.google.com/open?id=1tVJOSN58LBtLC9rE88nCO4ptrlMxkrWv> (Here you can find a copy of the PowerPoints we used in class. There are several more advanced topics covered here also.)
  + <https://drive.google.com/open?id=0B-ttkEmng1BFN3hlTTNNOTQ0VGc> (Here you can find several PowerPoints as well as several practice questions. Some of the practice questions will be about material you are not required to know, but it is still good review.)
* It is essential that you study the material noted above independently. There is not enough time in class to master the material.
* Over the winter break, it is essential that you stay current with studying. We encourage you to study for at least 1-3 hours daily.
* Strategies like writing cue cards and notes may be useful. Practice questions are also important. Feel free to ask us any questions during class.

**Exam Information**

The squadron officers will notify the relevant cadets about their eligibility to write the exam and specific dates and locations for writing. Please note the glider exam has 40 questions and the power exam has 50 questions. A mark of 80% is considered competitive. However, please remember that there are multiple evaluations criteria for being awarded the course. More general information about the exam can be found here: <https://bc-aircadetleague.com/wp-content/uploads/2017/10/2018-AIR-CADET-NSTC-BOOKLET-FINALRVSD-1004.pdf>

Sincerely,

Arjun Gill