**WEAX 201**

**Module 4 Make it Real Discussion Topics**

Choose ONE of the topics below. ***In 500 words or less,*** develop *a structured and engaging* initial post that covers all discussion points as outlined for that topic.

1. After reviewing the topics on stability and cloud development in chapter 6, construct **an engaging 3-paragraph initial post** that addresses the following points:
* **Paragraph 1:**  Differentiate between stable and unstable atmospheres 1) in a physical sense, including visual indicators that differentiate a stable atmosphere from an unstable atmosphere, and 2) in a measurable sense, i.e., in terms of environmental lapse rate values in comparison to the dry and moist adiabatic rates (graphics will add greatly to the discussion here).
* **Paragraph 2:**  Give at least one example for how the atmosphere can become 1) more stable, and 2) less stable (graphics will add greatly to the discussion here).
* **Paragraph 3:**  Relate a personal experience to the discussion in paragraphs 1 and 2.
1. After reviewing the topic **Topography and Clouds** in chapter 6, construct **an engaging 3-paragraph initial post** that addresses the following points:
* **Paragraph 1:** Briefly explain the atmospheric conditions that promote the formation “waves” on the leeside (downwind side) of mountain ranges. What are the visual indicators of the existence of these waves? (graphics will add greatly to the discussion here)
* **Paragraph 2:**Summarize the specific aviation-related effects or hazards associated with the phenomena described in paragraph 1.
* **Paragraph 3:** You have two options for this paragraph:  1) Summarize an actual aircraft incident that illustrates the hazardous impacts of this phenomena, **OR** 2) Give us “your take” on the relevance and importance of the topic from your own perspective - personal points of view or related experiences, for example.
1. After reviewing the module 4 Mini Lesson: **Applications of Precipitation in Aviation,** construct **an engaging 3-paragraph initial post** that discusses the hazardous aspects of *either* **aircraft****icing** *or* **hail** in aviation. The paragraphs should address the following points:
* **Paragraph 1:** Summarize the atmospheric processes and conditions that form your chosen hazard (either**aircraft icing** or**hail**). (graphics will add greatly to the discussion here)
* **Paragraph 2:** Summarize the specific aviation-related issues associated with your chosen hazard.
* **Paragraph 3:** You have two options for this paragraph: 1) Summarize an actual aircraft incident that illustrates the hazardous impact of your chosen hazard to aviation, **OR** 2) Give us “your take” on the relevance and importance of the topic from your own perspective - personal points of view or related experiences, for example.