QUESTIONS REGARDING DUDA’S POWER POINT PRESENTATION ON “CONTRAIRS”

While searching the NASA website on July 31, 2008, I found a link to David Duda’s (Hampton University / NASA LaRC), power point presentation on “Contrails” (no date provided for this presentation). The presentation provides pictures of interest and information on contrails. It does not answer critical questions about persistent jet contrails but it does provide the following information:

1) “…Contrails have been around for a long time! They were first described in the scientific literature in 1919…” Since no jet engines were in existence in 1919.

2) “…During World War II, contrails sometimes littered the skies during aerial combat…” This statement is true but the contrails would have been created by propeller driven airplanes, smoke, and other sky obscurants used during WWII.

   It should be noted that there were only a handful of jet engines in small experimental aircraft at that time in England and Germany.

3) “…Persistent contrails occasionally cover large areas. Like cirrus clouds, contrails contribute to global warming…” We currently estimate that contrails add an additional 0.5 to 5 percent warming to the greenhouse gas effect…” Water vapor is a green house gas.

4) “…By 2050, the warming due to contrails may be 2.5 to 25 percent of the current greenhouse gas warming…” Why aren’t we curtailing all jets leaving persistent jet contrails now in order to eliminate this threat to climate change and global warming? No answer to this question in the presentation. If we are serious about reducing ‘global warming’ why isn’t this issue addressed at the state or federal level, especially in California and by the U.S. Congress?

5) This presentation fails to discuss the climate change produced by persistent jet contrails when they turn into white haze and man-made clouds. Duda does not address the following statement made from NASA studies:

   NASA noted in an October 2005, newsletter that increasingly persistent contrails may turn into manmade clouds that are “…trapping warmth in the atmosphere and exacerbating global warming…” NASA goes on to state that “…Any change in global cloud cover may contribute to long-term changes in Earth’s climate. Contrails, especially persistent contrails, represent a human-caused increase in the Earth’s cloudiness, and are likely to be affecting climate and ultimately our natural resources…”

6) The pictures in this presentation are also of interest. There is only one date 2002 on a satellite picture in the entire power point presentation. Thus, there is no way to date this presentation or the pictures as no credits are given for them.

7) This power point presentation does not provide information on why jet contrails, produced by jet engines, have only persisted in their present form since the late 1980s.

8) This presentation addresses contrails in a general manner which includes smoke and other types of contrails produced for air shows and skywriting. It also mixes propeller engine and jet engine contrails. The discussion by NASA and other entities should be on the type of persistent jet contrails which persist and exacerbate global warming, produce white haze and man-made clouds. These are the ones which may negatively impact agriculture production and change our climate.

9) What are contrails and defines other terms contrails: “…Also known as Vapor Trails, Jet Trails, ‘Chemtrails’…” This is limited “contrail” information and does not address the problems they create.