***T-44A Briefing Guides***



EVENT: **I4602**

**SYLLABUS NOTES:**

1. Each flight should consist of a mix of approaches flown in the I4100 block.
2. Events should have a minimum of four approaches per event and include at least two procedure turn approaches. Emergency procedures should be emphasized in this block.
3. Each event shall include a minimum of one approach with the flight director and one approach without the flight director.
4. Holding should be accomplished and graded on at least two events, one of which should be GPS holding.
5. All events shall include a missed approach and should include at least two circling missed approaches in the block.
6. One approach per event with IP as PF and SMA as PM, emphasizing CRM callouts, radio communications, and emergency procedures.
7. SMAs shall bring one DD 175 per flight plan per SMA and one DD 175-1 per aircraft for their planned profile to every brief. SMAs shall draft a flight plan than will execute the required maneuvers for the events.

**DISCUSS ITEMS:** RVSM (Reduced Vertical Separation Minimum), Course Deviations for Weather, Weight and Balance Form F, “Land as soon as Practicable vs. Possible”, Other…

**RVSM (Reduced Vertical Separation Minimum) –**

The vertical separation is now 1000’ instead of 2000’. This is only from FL 290 up to 410. From FL 180 to 290 the requirement has always been and is still 1000’.

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b. Mandate. At 0901 UTC on January 20, 2005, the FAA implemented RVSM between flight level (FL) 290−410 (inclusive) in the following airspace: the airspace of the lower 48 states of the United States, Alaska, Atlantic and Gulf of Mexico High Offshore Airspace and the San Juan FIR. (A chart showing the location of offshore airspace is posted on the Domestic U.S. RVSM (DRVSM) Webpage. See paragraph 4−6−3.) On the same time and date, RVSM was also introduced into the adjoining airspace of Canada and Mexico to provide a seamless environment for aircraft traversing those borders. In addition, RVSM was implemented on the same date in the Caribbean and South American regions.

 Online – RVSM.com

[**RVSM**](http://www.rvsm.com/gloss-lookup.html?search=RVSM)  is a newer set of rules & regulations that has been recommended by the [**ICAO**](http://www.rvsm.com/gloss-lookup.html?search=ICAO) , and will be enforced by the [**FAA**](http://www.rvsm.com/gloss-lookup.html?search=FAA) , the [**JAA**](http://www.rvsm.com/gloss-lookup.html?search=JAA)  and other civil aviation authorities around the world.  The purpose of RVSM is to free up airspace between[**FL290**](http://www.rvsm.com/gloss-lookup.html?search=FL)  and FL410 (inclusive).

Before RVSM, a limited number of flight paths were allocated between these altitudes to ensure that aircraft would not pass one another vertically too closely.  The 2000' minimum vertical separation was necessary because the instruments used to display, report, and control aircraft altitude had poor accuracy compared to today’s standards.  Because these altitudes are the most fuel-efficient, they are the most desirable and, consequently, the busiest.

As air travel has become more prevalent, the problem of congestion and flight safety at these popular altitudes has worsened.  Flight path planning became a major issue for operators wanting to utilize these altitudes.  Recognizing the problem early on, the ICAO and other organizations began to do studies looking for viable solutions.  Of all the possibilities examined, RVSM was selected by the ICAO as the one to recommend to their member states and various other organizations.

**Course Deviations Due to Weather –** Source: <http://asrs.arc.nasa.gov/publications/directline/dl2_rock.htm>

Another good source: <http://www.faa.gov/pilots/intl/oceanic_ops/media/oceanic_wx_deviation_proc_land.pdf>

###  Reducing The Impact

### Timely communication can help the pilot avoid thunderstorms while still allowing the controller to provide separation from other traffic. Last minute requests are difficult to coordinate.

#### Pilots

#### Don't assume that the controller knows where all the thunderstorm activity is located. Tell him what you want and what you can do, not what you can't do, when making your request.

1. Plan ahead--give the controller as much notice as possible so that inter/intrafacility coordination can be accomplished in a timely manner.
2. The pilot is responsible for the operation of the aircraft and the safety of its passengers. Timely PIREPS can help the controller work with the pilot in accomplishing this by formulating a traffic plan in advance and relaying this information to other aircraft.

#### Controllers

1. Controllers need to minimize last minute surprises by finding out exactly what the pilot has in mind when they request clearance to deviate. Carte Blanche approvals can lead to problems.
2. Controllers too should plan ahead. Developing a good plan for future traffic flow, and letting flight crews know in advance what's going on will go a long way toward reducing conflicts and last minute surprises.

#### When All Else Fails...

1. Since the controller is not authorized to go below minimum-required separation unless an emergency is declared, and will do whatever is necessary to insure that separation loss does not occur, the final decision on the course of action rests with the pilot.
2. Pilots are reluctant to declare an emergency. However, in certain situations, there may be no other alternative available to the pilot. FAR 91.3(b) states that: "In an in-flight emergency requiring immediate action, the pilot-in-command may deviate from any rule of this part to the extent required to meet that emergency."
3. The Airmen's Information Manual (AIM), paragraph 441, states: "An aircraft is in at least an urgency condition the moment the pilot becomes doubtful about position, fuel, endurance, weather, or any condition that could adversely affect flight safety."
4. Once the pilot declares an emergency, the controller can provide advisories and other services until the emergency situation no longer exists and normal radar or vertical separation can be reestablished.

**“Land as soon as Practicable vs. Possible” -**

UPT –

Land as soon as possible - An emergency shall be declared and a landing accomplished at the nearest suitable landing area considering the severity of the emergency, weather conditions, field facilities, ambient lighting and command guidance.

Land as soon as practical - Emergency conditions are less urgent and, although the mission is to be terminated, the degree of the emergency is such that an immediate landing may not be necessary.

**Homework: Form F. Use weight in the natops example. Carrying 4 passengers 200 lbs a piece. Trip to El Paso.**