

Max Trescott - SJ Flight

From: Max Trescott - SJ Flight [info@sjflight.com]
Sent: Sunday, December 30, 2007 10:55 AM
To: 'bobby.sturgell@faa.gov'
Subject: My article urging FAA to set more aggressive goals for GA safety

3405 Ridgmont Drive
Mountain View, CA 94040
December 30, 2007

The Honorable Robert A. Sturgell
Acting Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, D.C. 20591

Dear Mr. Sturgell,
Congratulations on your nomination to be the new FAA Administrator. I'd like to offer my best wishes for a productive and rewarding five years.

I'd like to call your attention to a post that I'm adding to my *Max Trescott on General Aviation* blog at www.maxtrescott.com. In it, I urge the FAA to set more aggressive goals for reducing the general aviation fatal accident rate. I point out the FAA's success in reducing the commercial fatal accident rate by more than 60% over the last ten years, and the new long-term goal to cut the rate of commercial fatalities by an additional 50% by 2025.

By contrast, from 1997 through 2006, the rate of fatal accidents declined from 1.36 to 1.26 accidents per 100,000 hours flown, a 7.4% decrease. As I'm sure you know, the number of accidents declined more, but historically much of the decline in the number of fatal accidents is directly attributable to a decrease in the total number of hours flown, rather than a decline in the underlying accident rate.

I also point out that the FAA performance target for 2008 allows the number of general aviation fatal accidents to increase by 3%, from 314 accidents in 2007 to 325 accidents in 2008, and still allow the FAA to have a "green" passing scorecard grade. I understand that the current performance target of 325 fatal accidents for 2008 is high partially because of the larger than expected decline in the number of accidents in 2007, however it makes little sense to retain a target that allows an increase in accidents.

More importantly, there is still no long-term goal for reducing general aviation accidents. The last two annual *FAA Flight Plans* have carried nearly identical statements that long-term targets for general aviation accidents "are under development." By the way, that phrase is used nowhere else in the *Flight Plans*.

I'd like to propose that the FAA set an aggressive goal of reducing the general aviation fatal accident rate by 50% by the year 2020. Achieving a reduction that large won't be easy, but if we achieve only a 40% reduction, thousands of lives will be saved. I've attached the full text of my post below. Thank you for your time and consideration on this important issue.

Sincerely,
Max Trescott, Master CFI

12/30/2007

From: www.maxtrescott.com

General Aviation Needs an Aggressive Safety Goal

It's time for the FAA to set an aggressive goal, comparable to the ones they set for airliners, for reducing the general aviation fatal accident rate. Without one, senseless accidents will continue, needless lives will be lost, and potential new pilots will be scared away.

The general aviation safety record has improved over the years due to the leadership and collaborative efforts of the FAA, the AOPA Air Safety Foundation (ASF) and other organizations, and more can be done. From 1997 through 2006, the fatal accident rate rate declined from 1.36 to 1.26 accidents per 100,000 hours flown, a 7.4% decrease per the ASF's 2007 Nall Report, an authoritative summary of GA accident data. The number of fatal general aviation accidents declined by 5% in 2007, though this figure is directly affected by year-to-year variations in the number of hours flown. Historically, much of the decline in the number of fatal accidents is directly attributable to a decrease in the total number of hours flown, rather than a decline in the underlying accident rate. Thus measuring the rate of accidents, as the FAA does for commercial aviation, gives a more accurate picture of the likelihood of an accident occurring, versus counting the number of accidents.

However, the current FAA performance measure for general aviation is still the number of fatal accidents per year. This figure is one of many measures on the FAA's performance report used to determine whether the FAA is meeting its goals, and it influences how much employees are paid. The FAA performance target for 2008 allows the number of general aviation fatal accidents to increase by 3%, from 314 accidents in 2007 to 325 accidents in 2008, and still allow the FAA to have a "green" passing grade on their scorecard. By contrast, their performance target for commercial aviation is to cut the rate of airline fatalities by 50% by 2025. Yet, there is no long-term goal for reducing general aviation accidents.

Background

In recent years, general aviation averaged over 300 fatal accidents per year, resulting in around 600 deaths per year. This is very high compared to air carrier aviation fatalities, which numbered 40 in 2005. By comparison, the NTSB reports that annually railroads account for over 700 fatalities, boating accidents claim over 800 lives, and car accidents kill over 40,000 people. Nonetheless, while the public shows little reticence to board a boat or drive a car, they tend to view small planes as unsafe

In April 1998, then FAA Administrator Jane Garvey announced, as part of the FAA's Safer Skies Initiative, goals for reducing general aviation and commercial aviation accidents. The target for general aviation was to reduce the number of fatal accidents from 400 to 350, a 12.5% reduction over ten years. A June, 2000 Government Accounting Office report said that this goal did "not encourage aggressive steps to decrease general aviation accidents." By contrast, the goal for commercial aviation was aggressive. It was to reduce the fatal accident rate by 80% over ten years, compared to a baseline measurement of accident data from the years 1996 to 1998.

To be fair, the FAA's current performance target of 325 fatal accidents for 2008 is high partially because of the larger than expected decline in the number of accidents in 2007. Still, the goal should be revised downward. Also, the FAA is planning to change their general aviation performance target from the number of fatal accidents to the rate of fatal accidents, and to set a long-term goal for reducing accidents. According to the FAA's FY 2008 Performance Target for General Aviation Fatal Accidents, the FAA hasn't used a rate measure since that requires an accurate measure of the number of general aviation hours flown, and in the past that voluntary survey data was considered unreliable. However, it

says that "...a survey was completed in FY 2004 that, for the first time, creates a statistically valid report of general aviation activity that the GA community agrees on. The next step is to create the baseline and work with the GA community on a reasonable target for the rate." The 2008-2012 FAA Flight Plan says regarding general aviation fatal accidents that "The targets for FY 2009-2012 are under development." A year earlier, the 2007-2011 FAA Flight Plan said that "The targets for FY 2010-2011 are under development."

Success in Commercial Aviation

While the general aviation accident picture is hazy, commercial aviation results are clear with unlimited visibility. Ten years ago, when the FAA set a goal to reduce the rate of commercial aviation fatalities by 80% by the year 2007, few thought it was possible. In fact, the goal wasn't reached, but to the surprise of many however, they did reduce the commercial aviation fatality rate by more than 60%.

Not content to rest on their laurels, the FAA is poised to repeat this success with their new goal of reducing the rate of commercial fatalities 50% by 2025. Obviously, they know that the higher one sets the bar, the more that is achieved. Even if the original goal isn't reached, far more is achieved than if a lower, "more realistic" goal were set.

The Need for New General Aviation Safety Goals

I urge the FAA to immediately set new general aviation accident performance targets for 2008 and 2009. In private industry, it would be inconceivable to set targets and pay bonuses for declining sales or decreasing profits. Likewise, the FAA needs a goal for decreasing, not increasing general aviation accidents in the next two years.

The FAA should repeat history and set another aggressive goal, but this time for general aviation safety. I propose a goal of reducing the general aviation fatal accident rate by 50% by the year 2020. With a higher bar, the FAA, industry, and other organizations will work even harder to find innovative new ways of achieving the goal.

Unfortunately, there are no easy fixes or silver bullets for attaining this goal. However, here are a few ideas.

- 1) Educate pilots on the greater risks involved in night flying. Less than 5% of flying is at night, yet 21% of fatal accidents are at night.
- 2) Identify unique regional risk factors and communicate them to airmen in each region, as I proposed to FAA Administrator Blakey. For example, my analysis of fatal accidents from 1993 through 2004 for the San Francisco Bay area showed that the fatal accident rate at night was 2.5 times the national average and VFR-into-IMC accidents occurred at a rate 6 times the national average.
- 3) For the Private Pilot checkride, modify the test criteria (the FAA's Private Practical Test Standard) to include knowledge of somatogravic illusion and black hole approaches, which are major contributors to night accidents. Test for knowledge of local accident risk factors and require a discussion of the personal minimums the new pilot will use after attaining his or her certificate.
- 4) Develop an online, interactive risk management tool for pilots to enter a profile of their experience, location, and proposed trip information to generate a risk assessment and recommendations.
- 5) Develop a hotline pilots can call to talk with a flight instructor to evaluate risk prior to a flight.

6) Consider adding knowledge requirements in accident risk factors to the flight instructor rating.

7) Add Global Forecast System (GFS) charts to the www.aviationweather.gov website and educate pilots on how to interpret these charts to avoid icing conditions.

8) Apply human factors analysis to current FAA procedures governing aircraft movements on the ground and in the air. For example, pilots sometimes confuse the ATC instructions “Hold Short” and “Position and Hold” since they both contain the word “Hold.” In some countries, the latter instruction has been replaced with “Line up and Wait” to avoid confusion.

Achieving a 50% reduction in the general aviation fatal accident rate isn't easy and will be harder than similar reductions in commercial aviation. However, if we achieve only a 40% reduction, we'll save several thousand lives. To not set aggressive short and long-term goals is unconscionable when so many lives are at stake.