



# FLIGHT-WATCH



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By: Alan Armstrong, Esq.

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## EMERGENCY AUTHORITY

### I. INTRODUCTION

This issue of Flight watch will address the emergency authority of the pilot-in-command to deviate from the regulations to meet the emergency. At the outset, it is important to note that the popular belief that a pilot who declares an emergency will be buried in paperwork has not been consistent with the experience of the author. A second point to ponder is that if you are deviating from the regulations to meet an emergency, it should not be a situation you created by your own lack of diligence or inadequate pre-flight planning. The third point to consider is that you may be deviating to meet an emergency when you never actually declared an emergency over the radio, nor has the word "emergency" been used in your communications with air traffic control.



### II. THE PILOT'S AUTHORITY TO DEVIATE FROM THE REGULATIONS TO MEET THE EMERGENCY

The authority of the pilot to deviate from the Federal Aviation Regulations (FARs) is found in both Section 91.3 and Section 91.123. Section 91.3(b) authorizes the pilot to deviate "from any rule of this part to the extent required to meet that emergency." However, Section 91.3(c) goes on to say that if a pilot deviates from the regulations to meet the emergency, he may, if requested by the Administrator, be required to submit a written report of that deviation. Perhaps this is the regulation that has fostered the myth that if you declare an emergency, you will be buried in paperwork.



Not only is pilot specifically authorized to deviate from the regulations to meet an emergency, but he is specially authorized to deviate from an air traffic control clearance or instruction when meeting an emergency as provided in Section 91.123(b). Also, a pilot who deviates in response to a traffic alert and collision avoidance system resolution advisory is authorized to do so but "shall notify ATC of that deviation as soon as possible. §§91.123(c). Finally if a pilot is given priority to meet an emergency, he shall submit a detailed report of that emergency within 24 hours of the incident if requested by Air Traffic Control as provided in §91.123(d).



According to paragraph 6-3-1 of the Aeronautical Information Manual (AIM) an initial communication concerning a "distress" situation should begin with "MAYDAY, MAYDAY, MAYDAY." Distress communications have absolute priority over all other communications and the word "MAYDAY" commands radio silence.

If the situation is one of "urgency," the initial call should be "PAN-PAN." Urgency communications have priority over all others except distress communications.

According to paragraph 6-3-2 of AIM, it is desirable to climb for better radio communications except for an unauthorized climb into IFR conditions which may be permitted by Section 91.3(b) of the FARs. If a pilot is not able to imme-

diately establish communications with ATC, he should squawk a code of 7700 on his transponder.

A distress or urgency call should include: (1) either "MAYDAY" or "PAN-PAN" in the initial call; (b) the name of the station addressed; (c) the aircraft identification number and type; (d) the nature of the distress or urgency; (e) the weather; (f) the pilot's request; (g) the aircraft's position if known; (i) fuel remaining in minutes; (j) number of souls on board and (k) any other useful information upon establishing contact with ATC, the pilot is to comply with the advice or instructions received.

### III. PRE-FLIGHT ACTION

Every careful pilot is aware of his pre-flight responsibilities set forth in FAR §91.103 which includes that the pilot be acquainted with weather reports and forecasts, fuel requirements, alternatives, and known traffic delays, as provided in §91.103(a). The pilot should also be aware of the runway lengths at airports of intended use and take off and landing performance data under §91.103(b). If performance data is not available in the aircraft flight manual, then other reliable information shall be used in evaluating the ability of the aircraft to perform satisfactorily in or on the runway environment under §91.103(b)(2).



The regulation on pre-flight action is supplemented by paragraph 5-1-1 of the Aeronautical Information Manual (AIM). This indicates that the pilot shall receive a pre-flight briefing and file a flight plan, and that the briefing may be conducted by telephone or in person by a Flight Service Station briefer or by accessing the Direct User Access Terminal System (DUATS).

VFR flight operations require that the pilot have available upon arriving at his destination 30 minutes of reserve fuel during daylight hours and 45 minutes of reserve fuel during night operations. If the pilot is flying IFR, then he must have adequate fuel to fly to his destination, execute an approach, execute a missed approach, fly to his alternate, execute an approach at the alternate, execute a missed approach at the alternate, and then operate the aircraft at normal cruising speed for 45 minutes under §91.167(a). But what happens if the pilot encounters a headwind or is kept at a lower altitude than flight planned and his fuel consumption is

such that he burned part of his reserve fuel? Is that a violation of the regulations? This question was addressed in FAA Interpretation 2005-12 involving flight operations of airlines under Part 121. In essence, the FAA has declared that the mere fact that the pilot uses a portion of his "reserve" in fuel is not alone a violation of the FARs if the use of the reserve became necessary as a result of circumstances not reasonably foreseeable.

Rarely will anyone know whether you have or have not used a portion of your "reserve" fuel. However, if you request priority handling from air traffic control because you are "minimum fuel", then you have just told ATC that you are requesting priority to meet an emergency under §91.123(d). If you do that, then the FAA may request that you write a report about why it became necessary to give you priority. If your flight planning was flawless and you merely encountered circumstances that were not foreseeable then there may not be a problem. On the other hand, if you could detect that there was a trend that your ground speed was not as fast as anticipated or that your fuel consumption was heavier than anticipated, then the FAA may ask you why you did not land earlier during the flight at an alternate location to avoid burning your "reserve" fuel.



Photo courtesy of John Slemp



What if you observe a thunderstorm directly in front of you and you request a deviation either left or right to avoid the thunderstorm? If you request permission from Air Traffic Control to turn left or right to avoid a thunderstorm and ATC refuses, can you initiate the turn yourself and declare over the radio that you are deviating to meet an emergency? The obvious answer is yes. It does appear that if you are given a course to fly or if you are on radar vectors and ATC denies your request to alter your course to avoid a thunderstorm, then it probably is a good idea to put on the ATC voice tape that you are deviating to meet an "emergency." But what happens if you deviate without formally declaring an emergency? The answer is that you could still argue that you deviated from an ATC instruction under FAR §91.123(b) to meet an emergency, even though you did not use that particular word of art on the radio frequency.

#### **IV. THE UNDECLARED EMERGENCY**

If you as a pilot are operating at an airport with a control tower and you are having difficulty with your landing gear requiring passes down the runway to verify that it is down and locked, then you can expect the control tower to ask you for the number of souls aboard the aircraft, the fuel (in hours) aboard the aircraft, and similar questions.

You may not have declared an emergency yourself, but the control tower is treating your situation as an emergency. This reality underscores the fact that a pilot may be deviating from the regulations to meet an emergency that has not been formally declared. However, as we discussed in the hypothetical situation involving the thunderstorm, if you suspect that your decision is going to be criticized or second guessed, then using the "emergency" word over the air frequency may be to your advantage, provided your assessment that an emergency exists is real.



To underscore the reality that an emergency may be undeclared, consider the airliner that departed Hawaii for Germany when dispatch called to the captain over the radio and told him there were no standby batteries in the navigation system. The captain returned the aircraft for landing to Hawaii and did not dump fuel to lower the landing weight of the aircraft. He landed over gross thereby exceeding the operating limitations of the aircraft. The FAA charged the captain with a violation of §91.13(a) [careless or reckless operation] and sought a 60 day suspension of his certificate. At trial, the judge lowered the suspension to 15 days. The pilot appealed the adverse ruling by the judge, and the NTSB reversed the suspension holding:



We agree that Scott [the pilot] had a reasonable basis for believing an emergency existed but do not fault him for failing to declare an emergency.



This declaration by the Board that a pilot may be deviating from the regulations to

meet an emergency even though it has not been declared underscores the reality that in some circumstances, pilots are deviating from the regulations to meet an emergency without formally declaring an emergency over the radio frequency.

## V.

### USING THE APPROPRIATE WORDS

As indicated in the discussion previously in this article, there are times when using the word "emergency" over the radio frequency is precisely what you should do to cover yourself, such as when deviating to avoid a thunderstorm. There are two other terms of art that every pilot should have in his vocabulary. The first term is "unable." The second term is "block altitude."

If ATC tells you to cross an intersection at an altitude and you know the aircraft is incapable of that performance, then you're only out is to utter the magic words "unable." ATC can make other arrangements. It is not your responsibility to place your aircraft in peril in order to satisfy ATC's master plan. If you are in turbulence and the aircraft is caught in a thermal, you should promptly get on the radio and request from ATC a "block altitude assignment." ATC does not know of your flight conditions, and it is your responsibility to make it aware of your inability to maintain your assigned altitude. Requesting a "block altitude assignment" from ATC is an excellent way of relating to the controller the nature of your predicament.



## VI. THE ABILITY OF ATC TO PAINT YOU INTO A CORNER

How many times have you been given a clearance to take off behind a jet that just departed in front of you? Every time that happened, ATC uttered the magic words "caution wake turbulence." It is common knowledge that waiting three minutes after departure of a jet is a good operating practice to avoid the prospect of getting caught up in the wake turbulence of the departing jet. Paragraph 7-3-8(c) of the AIM puts the monkey squarely on the pilot's back with this comment:

Pilots are reminded that in operations conducted behind all aircraft, acceptance of instructions from ATC in the following situations is an acknowledgment that the pilot will ensure safe take off and landing intervals and accepts the responsibility for providing wake turbulence separation.

The separation of aircraft is the job of ATC. If ATC gives you a departure clearance just behind a jet and utters the magic words "caution wake turbulence," then you have just taken it upon yourself not only to perform ATC's job for it, but you are ensuring that your operation behind the jet will not result in a hazardous circumstance to your aircraft.

## VII. TWO WAY RADIO FAILURE IN IFR

The loss of radio communications with ATC while on an IFR flight plan is not, alone, an emergency. If the aircraft can safely be landed in VFR conditions, then that is the course of action to follow as explained in §91.185(b). If radio failure occurs while in IFR, then the route to be followed is set forth in §91.185(c), (e.g.: the route assigned by ATC in the last clearance, the direct route is being radar vectored, the route you were told to expect, or the route that you filed in your flight plan. The altitude to be flown is the highest for the route segment of the altitude that you were cleared to fly, or the minimum in route altitude or the altitude ATC advised you to expect.) Since there are specific procedures that apply in the event of two way radio failure with ATC on an IFR flight plan, that, alone, should not constitute an emergency.



**VIII.**  
**SOME REGULATIONS A PILOT MAY  
CONFRONT IF HE DEVIATES TO  
MEET AN EMERGENCY OF HIS  
OWN MAKING**

During the course of my career in representing pilots, I have seen any number of cases where pilots were violated because of an emergency they created. These circumstances have included making forced landings due to fuel exhaustion. A pilot in this circumstance would be violated for §91.13 (a) involving careless or reckless operation and inadequate fuel reserve either for VFR under §91.151 or under IFR under §91.67. Pilots who scud run to meet IFR conditions will be charged to be in violation of §91.13 (a) involving careless or reckless operations and also failing to operate at the minimum safe altitude under FAR §91.119. Pilots who operate their aircraft in known icing conditions without deicing equipment will be charged with a violation of §91.13(a) involving careless or reckless operation and also §91.9(a) dealing with the operation of an aircraft in violation of its limitations.



**IX.**  
**CONCLUSION**

There is nothing wrong with deviating from the Federal Aviation Regulations to meet an emergency. It is, however, considered poor form to deviate from the Regulations to meet an emergency which you, yourself, created. It is our responsibility as careful and prudent pilots to carefully and thoughtfully prepare for our flights so that we will not encounter situations that require us to execute our emergency authority. By the same token, it is true that there are circumstances when ATC is more concerned about their master traffic plan than your getting bumped around a bit in a thunderstorm. If it is your assessment that the route you are being directed to fly by ATC is going to put you at risk, then it is your responsibility to employ your emergency authority and put it on the ATC voice tape.

It is also important to understand that you may be meeting an emergency which you and ATC both understand exists but there may be no formal declaration of the term "emergency" during the course of your communications. If you cannot ensure that the landing gear of your aircraft is down and locked, everyone understands that your aircraft is in peril and ATC will treat your circumstance as an emergency even though the magic word has not been employed.

It is important for all pilots to know how and when to exercise their emergency authority and how this conduct will be viewed by the FAA. Generally, if the emergency is not of your own creating, you will have little to fear.



Alan Armstrong is engaged in the general practice of law with an emphasis in the following areas:

Aviation Matters, Personal Injury,  
Professional Negligence (Malpractice),  
Products Liability

Phone: (770) 451-0313 Fax: (770) 451-0317  
Email: [alan@alanarmstronglaw.com](mailto:alan@alanarmstronglaw.com)

Website Addresses: [www.alanarmstronglaw.com](http://www.alanarmstronglaw.com)  
[www.flyingtigersfilm.com](http://www.flyingtigersfilm.com)

Please contact us at  
[flightwatch@alanarmstronglaw.com](mailto:flightwatch@alanarmstronglaw.com)  
with any questions, comments, or if you no longer wish to receive Flightwatch via



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