

Minimum Safe Altitudes: More Common Sense Considerations

By Christine Kalakuka and Brent Stockwell

Part One of this article pointed out that the purpose of the Federal Aviation Administration's (FAA) Federal Aviation Regulation (FAR) §91.119 – Minimum Safe Altitudes — is to protect *persons and property on the surface*. That does not mean balloonists should disregard the safety and protection of passengers, crew, themselves, and their equipment, in addition to adhering to the law.

The Balloon Federation of America (BFA) has been trying for over a decade to get the FAA to exempt balloons from certain portions of §91.119 as a safety enhancement. The BFA was granted permission by the FAA last year to conduct some testing to determine if a change would be appropriate, however no conclusions of the study have been released.

There are several relationships between flight altitude and flight outcome worth consideration for planning safe flights.

Accidents

Many pilots fly too low. Not only illegally low, but dangerously low. Most balloon accidents happen close to the ground. A national air traffic specialist, when asked to review the Balloon Federation of America's (BFA) petition to the FAA to grant a waiver for a test study to support its request that balloons be excluded from certain portions of FAR §91.119 stated: "Our review of NTSB Balloon accident data and causal factors does not show any empirical evidence to support a safety issue related to prescribed minimum safe altitudes. In fact, the empirical evidence indicates that the biggest safety risk is inadequate obstacle clearance." This same specialist, a balloonist with over 1,000 hours in balloons said: "In my experience as a balloonist, I've never felt that the minimum altitude (regulations) in any way decreased my level of safety."

An example can be taken from a study conducted on balloon accidents, reported in the May 2003 issue of *Balloon Life*. In the 37-year period of the study, there were 48 documented fatal balloon accidents in the U.S., with a total of 88 deaths. Powerline strikes alone – the most dangerous accident — accounted for 28 accidents and 55 deaths. In that same period, there were 373 non-fatal accidents involving powerlines. The percentage of obstacle-related accidents is even higher, as only powerline strikes were isolated in the report.

Changing the regulation won't move or remove powerlines, antennas, fences, buildings, and other obstacles balloons strike when flying close to the ground. Vigilance watching for obstacles is required, no matter what the law.

Noise

The blast of a hot-air balloon burner may be music to a pilot's ears, but it can be cacophony for someone who just got to bed after working the late shift. Until all balloon heaters are silent, noise will be an issue.

In 1984, the FAA issued Advisory Circular (AC) 91-36C entitled "Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas." Under Background, the AC stated; "Adherence to the practices described below would be a practical indication of pilot concern for environmental improvement, would build support for aviation, and forestall possible regulatory action." In the September 2004 Revision (91-36D) that statement was amended to: "Potential noise impacts to noise-sensitive areas from low altitude aircraft flights can also be addressed through application of the voluntary practices set forth in this AC. Adherence to these practices is a practical indication of pilot concern for the environment, which will build support for aviation and alleviate the need for any additional statutory or regulatory actions." The 2004 AC defines noise-sensitive areas to include "residential, educational, health and religious structures and sites, and parks, recreational areas (including areas with wilderness characteristics), wildlife refuges, and cultural and historical sites where a quiet setting is a generally recognized feature or attribute."

The situation is worsening for balloonists, as hot air balloons are specifically named in the 2004 AC, and voluntary practices include the following: "Pilots operating noise producing aircraft (fixed-wing, rotary-wing, and hot air balloons) (our emphasis) over noise-sensitive areas should make every effort to fly not less than 2,000 feet above ground level (AGL), weather permitting."

We recognize a subtle shift in the FAA's approach to noise; the wise balloon pilot will heed what is now an expressed desire by the FAA not to be required by the complaining public to enact laws.

Balloon pilots can avoid making the kind of noise that prompts people to complain to the FAA. Two practical actions are to stay at higher altitudes above congested areas, and make steep approaches to landing to avoid long, low approaches.

Landowners

Closely related to the noise issue is the desire of some landowners not to have balloons fly low over and/or land on their property. One result of the initial story on Minimum Safe Altitudes was notice from several people of disturbing attempts by local authorities to control balloon activities at the request of local residents.

In one instance, balloonists sought advice from the FAA's legal department and got a reply which included these observations: "To the extent the city is trying to regulate balloons while they are in flight (and this would include specifying launch procedures), they are treading on FAA turf, and the city's actions may be preempted. The question is has the FAA exercised so much control that there is no room for local action." This implies there may be a door left open for local jurisdictions, and it would certainly be best to avoid another authority with some kind of say-so about how balloons may fly.

Balloon events may attract landowner attention to balloons.

The first week in June, Dan Nachbar hosted the first Experimental LTA Gathering in Amherst, Mass. According to long-time pilot David Tanzer, Dan did everything right, from getting permission from many local landowners to use their property, to establishing an atmosphere that promoted courtesy to and from participating pilots. David reported that all pilots were extremely considerate and respectful of each other, local spectators, landowners, and neighbors. They exhibited common sense and common courtesy – an unbeatable combination for a successful balloon event, and happy landowners and locals. A well run balloon event can promote ballooning instead of attracting negative attention.

BFA/AAAA Minimum Altitude Studies

In the first part of this study last March, we had communicated with FAA Inspector Al Peyus, AFS-820, Washington, D.C., who oversaw the study conducted by the BFA to consider a change in FAR §91.119 for balloons. Peyus was kind enough to send the data he had received from the BFA, which consisted of 40 flight reports set forth in a spreadsheet; scant data. Peyus said he was waiting to receive data from a similar study conducted by the Albuquerque Aerostat Ascension Association, being overseen by Albuquerque FSDO Inspector J. D. Huss.

We will report on the conclusions of the BFA/AAAA/FAA studies as soon as results are forthcoming.

Conclusion

No amendment of Federal Aviation Regulations will eliminate or diminish complaints by citizens who are disturbed by low flying balloons. Balloon pilots, by flying considerately and skillfully as the FAA would like, can voluntarily express their concern for the environment and the rights of those on the ground to peace and tranquility.🔦

See FAA Circular AC No: 91-36D on page 36