

FCC Testimony - Obsoleting 121.5 ELT 3/19/2013

1. Most of the testimony in support of obsoleting 121.5ELT comes from folks with strong financial self-interest to do so. You should discount all such biased testimony, especially when not backed up with facts. And you should work hard to seek out the opposing viewpoints and the facts on their side. This aspect will be harder to uncover because few people have their careers or feeding their kids hanging in the balance for denying the banning of 121.5ELT.
2. Another lobbying body is the government agencies involved in SAR. They love 406ELT, but mostly because it cuts false alarms by 90% or so. That's a good thing, but has nothing to do with saving lives. So what are we trying to accomplish by forcing 121.5 ELT to perish? Save lives or reduce inconvenience and workload?
3. Many regular pilots/owners with no financial interest (beyond spending their own money for installing 406ELT) are operating from emotion and misinformation - because that's all they have to work with. 406 advocates are extremely persuasive in their rhetoric about "improved technology", but say nothing factual about saving lives. Of course we all want to be safe and it is seductive to spend a couple thousand dollars for a great safety benefit, but when we look at facts, 406ELT has not been shown to be safer than 121.5.
4. None of the supporting testimony has cited any evidence that 406ELT has a significantly better track record at saving lives than 121.5ELT. There is scant evidence despite many years of 406 ELT experience, but what is available indicates that neither technology is better than 30% at promptly calling SAR services to the correct location to save lives in a downed aircraft. So the question should be: why are we hanging our hats on any ELT technology, when they overwhelmingly fail in their hour of need due to broken antennas, damaged electronics, failed g-switches, or a shielded transmission location such as being under water? We need a solution that doesn't involve delicate electronics surviving massive trauma in a crash!
5. Please review GLIDING INTERNATIONAL magazine, March 2010 issue. (I can provide a copy of the full article they call their "research paper".) Here is an extract of their article on the available data comparing 121.5ELT with 406ELT:

After 30 years of development of the existing ELT system, the success rate is still only about 14%.

The false alert rate for the existing ELT systems (121.5) is about 94%. The new 406 ELTs do not display a better success rate than the 121.5 units, although they do offer a faster response to false alerts.

Surely we must all find this to be outrageous data, and a call to action, not to kill 121.5 but to follow a radically better pathway to save lives?

6. Perhaps the greatest tragedy here is the false confidence that has been perpetrated on the entire industry. Pilots everywhere understandably believe that 406 will save them but 121.5 will not. Common sense and statistics say there is little difference and both technologies are atrocious at doing the job! Let's all quit misleading the general public on this one. If you want to kill 121.5 because you want the bandwidth, then say so. If you want to force 406 in place to reduce SAR workload from false alarms, then say so. If you just want to make more money by selling new gadgets, then say so.
7. The entire field of safety avionics is hugely complex and confused and unstable, and will remain so for a decade or more. This is simply the reality of the digital technology revolution. ADS-B alone is an entire family of technologies and capabilities, as yet only partially unfurled. And the exciting and hugely-promising concept of satellite breadcrumb real-time tracking is in its infancy and is overwhelmingly better than any ELT technology. Why? Because the concept does not require the device to survive a crash in order to raise the alarm. And because the social benefits of folks on the ground being able to track all flights in near-real-time adds useful value to the product (better voluntary adoption) and builds-in a constant monitoring process to ensure it is working correctly.
8. The FCC and FAA, instead of focusing on any ELT technology, should be fostering, encouraging, and incubating satellite trackers. They all have the wonderful advantage that they don't have to survive a crash to call out the cavalry. Sure, they are not yet perfect, but they are already vastly better than any ELT. Just by looking at the product concept of SPOT, Spidertracks, and InReach, and from anecdotal reports from users, it is very easy to conclude that they will be at least 90% effective in the hour of greatest need. SPOT and Spidertracks have been around for several years now and have compiled a long list of lives saved, mostly not related to aviation but the data is relevant and impressive.
9. I note that SPOT and Spidertracks and Delorme InReach (and other similar companies) have not testified here as yet. May I suggest that the FCC should reach out and ask for their input?
10. Note that the State government of Alaska is far ahead of the FCC & FAA and the rest of the country on this matter. They have mandated satellite trackers on non-airline aircraft with their employees on board. Why? Because ELTs don't work, as evidenced by the tragic loss of Senator Ted Stevens and others in a downed aircraft in Alaska a few years ago! Again,

I suggest the FCC should be in contact with the State of Alaska on this matter to learn their data and rationale.

11. The end of 121.5 ELT will come soon enough, but it isn't now. It will die a natural death over the next decade or so as it gets overwhelmed by better solutions. 406ELT is not a better solution. I urge the FCC to stand back and refocus on what truly matters - finding downed aircraft very fast and saving lives. And demand factual evidence that lives will be saved before mandating the removal of 121.5ELT, which would effectively mandate 406ELT.

I strongly urge the FCC and FAA to quit fighting over 121.5ELT and turn their energy towards much better solutions and resolving the crazy landscape of avionics technologies that has developed. You have been overtaken by the pace of technology and you must catch up and get ahead of the game rather than wallowing in the past.

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