



## The Hard Deck: Its Time Has Come

By Tom Johnson SSF Trustee

A few years ago, the Soaring Safety Foundation (SSF) offered a new concept to the soaring community, the Hard Deck. The time has come to implement the concept of the Hard Deck into our Badge flying and SSA sanctioned contests.

For many years, the low altitude save was lionized in many articles in this publication. Pilots talked proudly among their peers about the low save that got them home. It was considered by many to be a badge of honor of their personal soaring achievements.

I became involved in soaring in 1975 and almost immediately, I learned of one of our local pilots who spun in from low altitude trying to affect a save during a contest. It struck me as very odd that many pilots viewed his accident and death as an accepted part of soaring. I started asking questions and quickly realized the deceased pilot had stacked the deck against himself.

I began to wonder what could be done to prevent an accident like this happening in the future. Even as a young 15 year old, I realized I had to have an altitude below which I would set up to land. And I have to admit I was afraid. Afraid I would find myself in a spin with no altitude to recover. I vowed to never put myself into that situation.

As the Navy took me around the country, every club had some minimum thermalling altitude in their SOP, but no one enforced it. The tales of the low save were still being regaled over a beverage. When I queried club leadership about this, they asked why I wanted to take the fun out of soaring.

At our Flight Instructor Refresher Courses (FIRC)s, we began introducing the concept of the Hard Deck. The familiar cry of "you're trying to take the fun out of soaring" rang loudly. But over multiple FIRC cycles, you could see the participants were beginning to buy into the concept.

We showed them the concept of the Hard Deck to be relatively simple. It is the Height Above Terrain (HAT) that, when you descend to it, you are done soaring and now should commence landing.

We explained that the HAT you use is your personal altitude that you trust you can switch from soaring mode to landing mode, reconfigure the aircraft, complete any checklists required, and safely maneuver the glider to a safe, controlled landing. This landing would be into the field, airport, etc. you decided on well before you reached your predetermined HAT.

We encouraged pilots that their HAT should be predetermined. They should determine a HAT below which they would not be reasonably assured to recover from an inadvertent stall/spin. (I have determined, for myself, this HAT to be 700 ft.)

This predetermination is really a self-evaluation and should be based on your current skills, proficiency, and aircraft. This self-evaluation should be done sipping a cup of coffee in the comfort of your living room. This allows you to establish a set of criteria, that when met, trigger you to enter the landing phase of flight.





Not to long ago, in the interest of safety, the contest community introduced the finish cylinder. Two miles from the field, at a reasonable minimum altitude, you finished the contest task, and now had time and altitude to successfully enter the landing pattern. The usual cries of trying to take the fun out of soaring were heard, but the community adopted this change and now it is an accepted part of the contest. And remarkably, contest flying is still fun, challenging, and rewarding.

It is time to implement a minimum HAT for SSA sanctioned contests. The Contest Director (CD) will establish either a HAT for the entire contest or a HAT for each contest day.

If, during a contest task, you get down to the events predetermined HAT, you have for scoring purposes, landed out. You will be scored as if you had landed at that point. Penalties for thermalling below the HAT could also be assessed at the discretion of the CD.

The idea is to create disincentives for thermalling low and trying to affect a save.

Impossible?

Too hard?

Can't be done!!

The fidelity of our terrain databases and the sophistication of most soaring navigation computers make it simple to determine your HAT almost anywhere in the country. And the scoring software could be modified to look for the minimum altitude. It already does this for the finish cylinder.

These changes would not hurt the competitive nature of racing. Like the bonus for out-landing at an airport, these changes would have a minimal effect of how pilots did a task. The changes would create point incentives for discontinuing a flight when it was appropriate to do so.

And most importantly, it would establish the concept that low altitude saves are a thing of the past.

Let's change the rules at Reno in February. The time for the Hard Deck is now.

