

One Great Soaring Day in July...

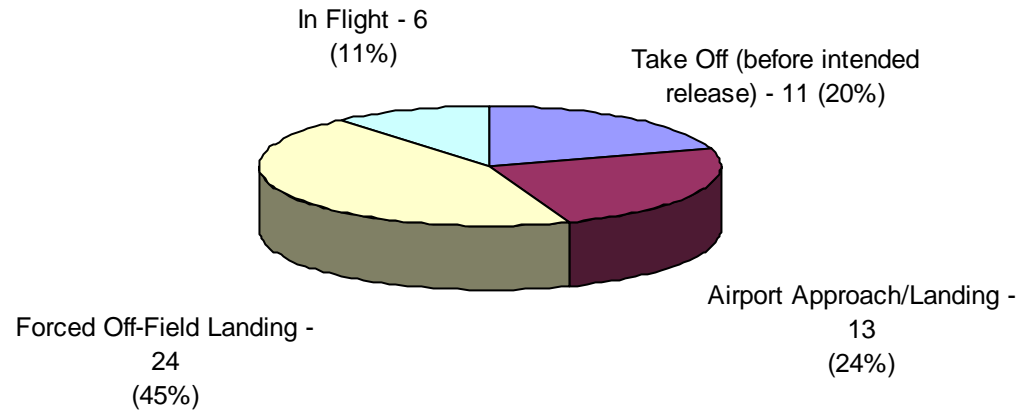


NTSB Identification: **DEN05LA108**
14 CFR Part 91: General Aviation
Accident occurred Saturday, July 09, 2005 in Moriarty, NM
Aircraft: Grob 103, registration: N916G
Injuries: 2 Uninjured.

New Mexico Glider Accidents

Type of Glider Accidents in New Mexico since 1962

Total: 54

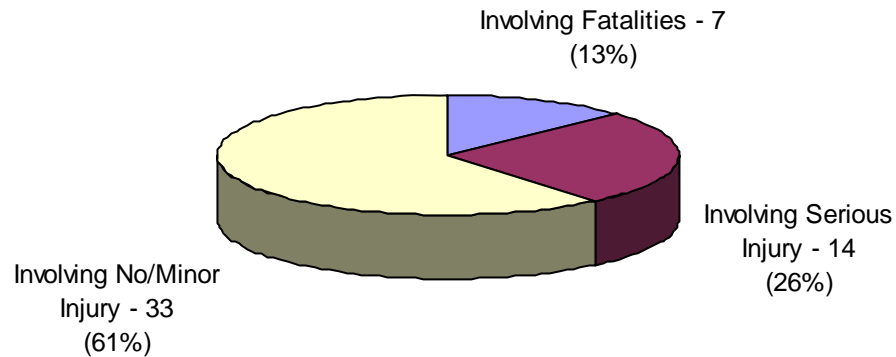


■ Take Off (before intended release) ■ Airport Approach/Landing ■ Forced Off-Field Landing ■ In Flight

New Mexico Glider Accidents

Type of Injuries Sustained in Glider Accidents in New Mexico since 1962

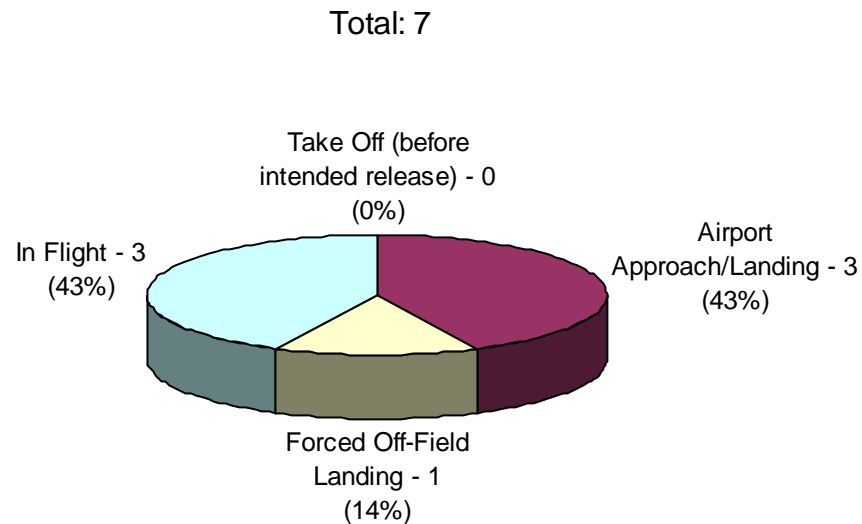
Total: 54



■ Involving Fatalities ■ Involving Serious Injury ■ Involving No/Minor Injury

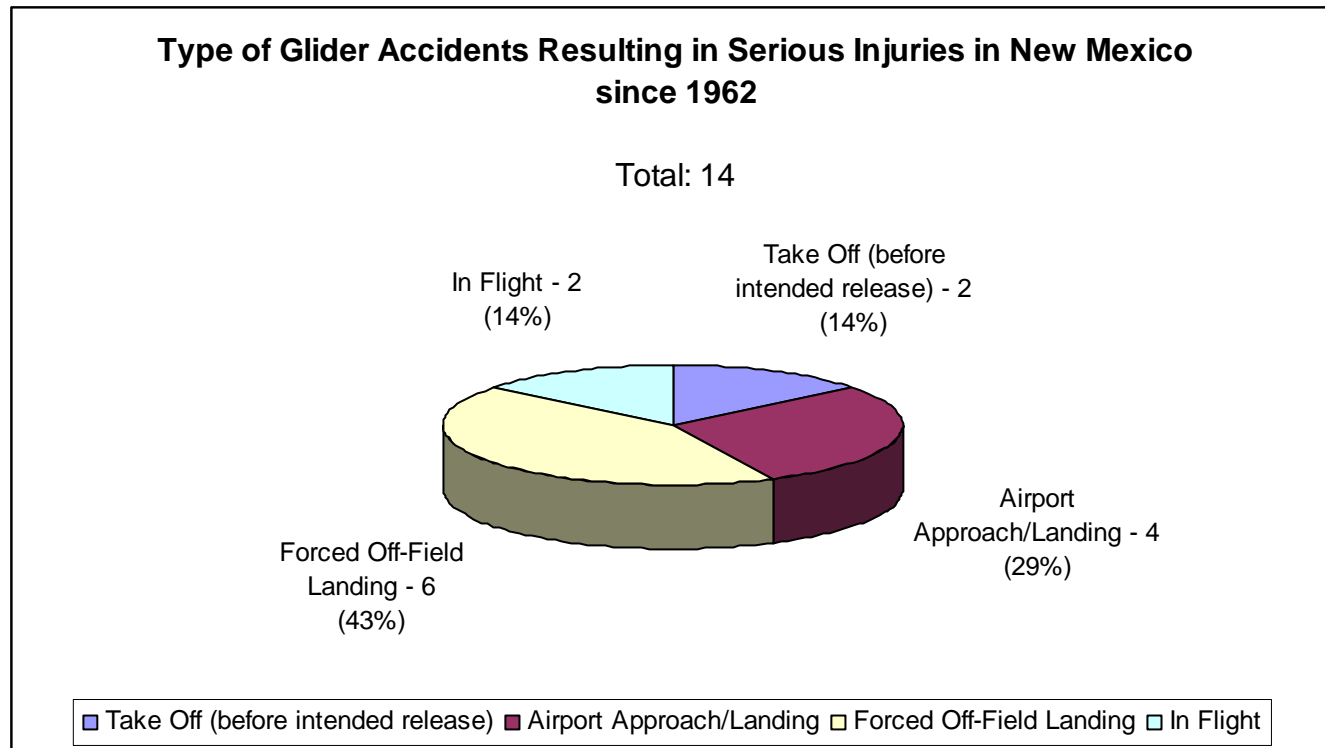
New Mexico Glider Accidents

Type of Glider Accidents with Fatalities in New Mexico since 1962

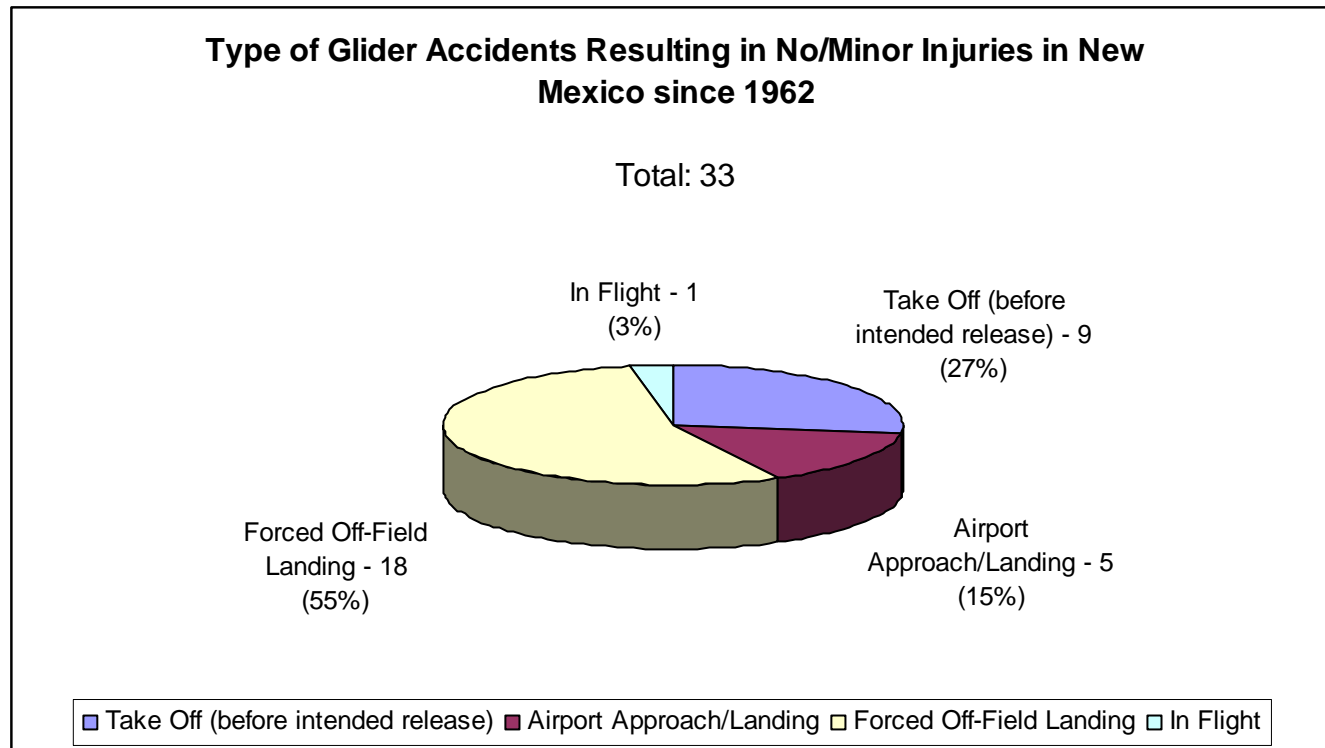


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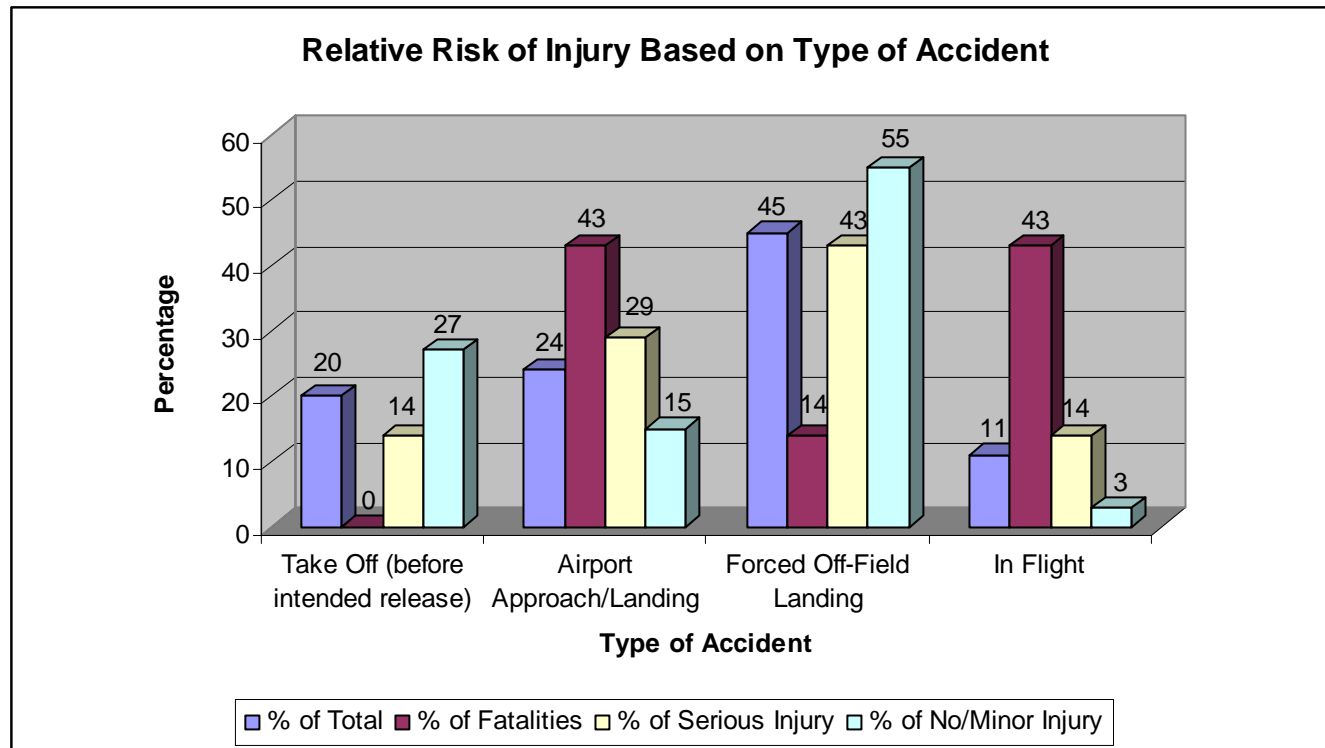
New Mexico Glider Accidents



New Mexico Glider Accidents



New Mexico Glider Accidents



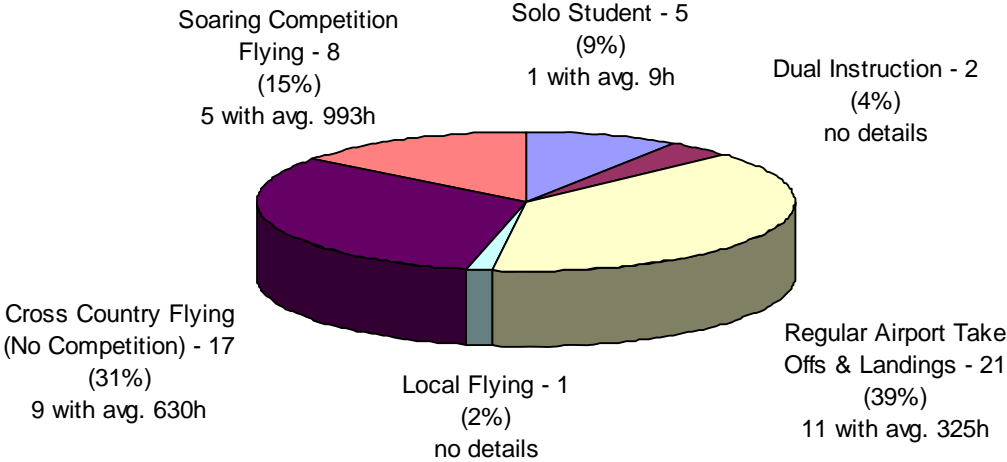
New Mexico Glider Accidents

Accidents by Type of Flying Operation

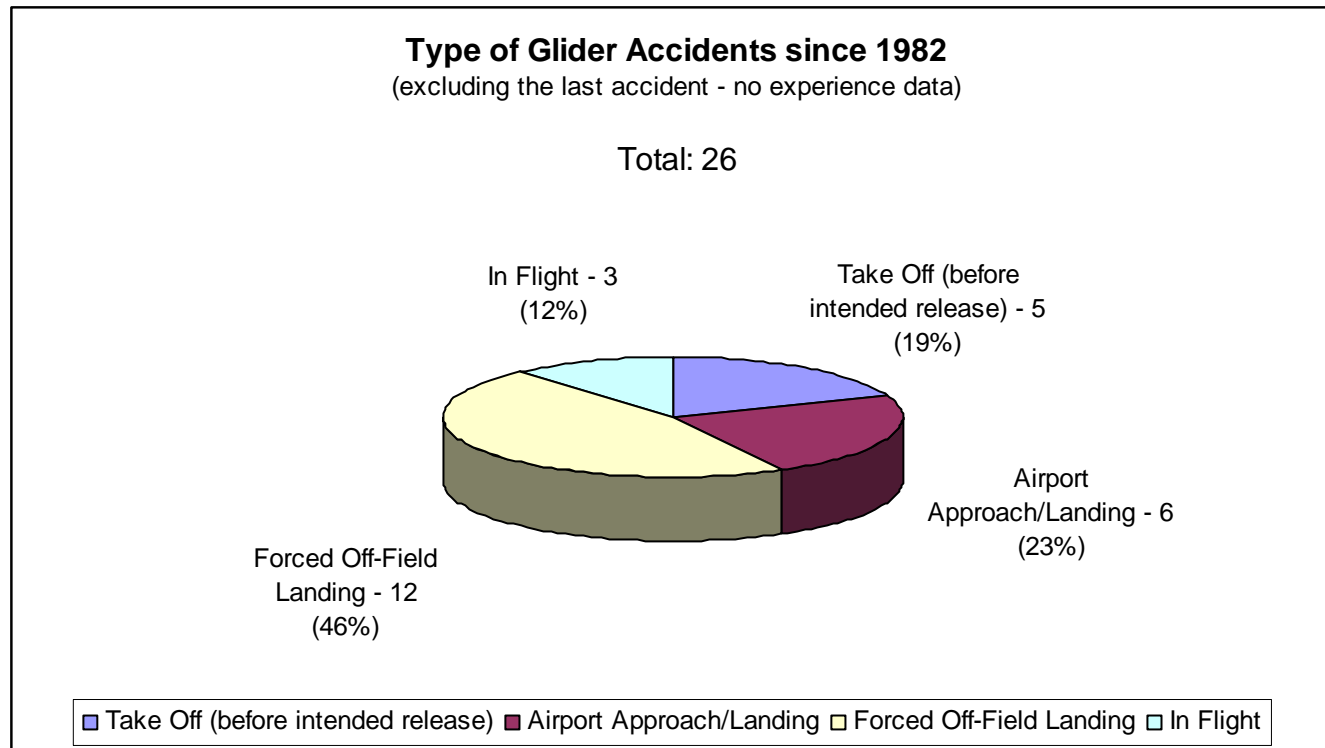
(the last line indicates number of cases available with detailed data on pilot's glider experience and their combined average)

Total: 54

(26 with an average of 547h of pilot experience in gliders)



New Mexico Glider Accidents



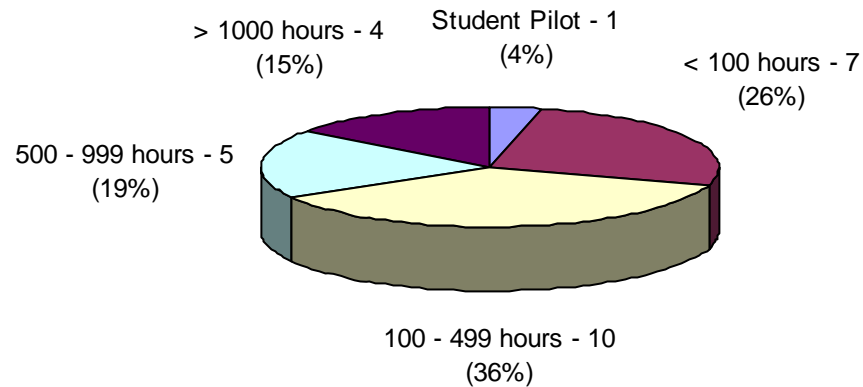
New Mexico Glider Accidents

Experience of Pilots Involved in Glider Accidents

(since 1982, excluding the last accident - no experience data)

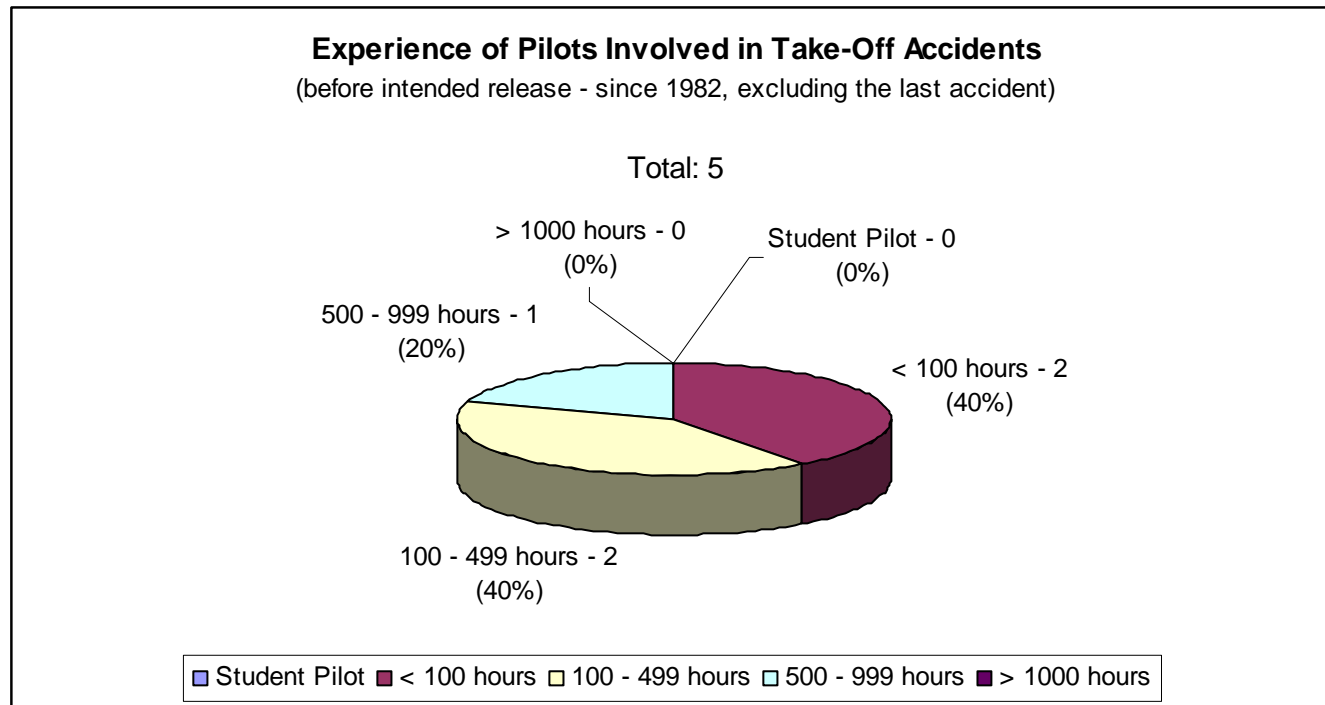
Total Number of Accidents: 26

Average Pilot Experience in Gliders: 547 hours

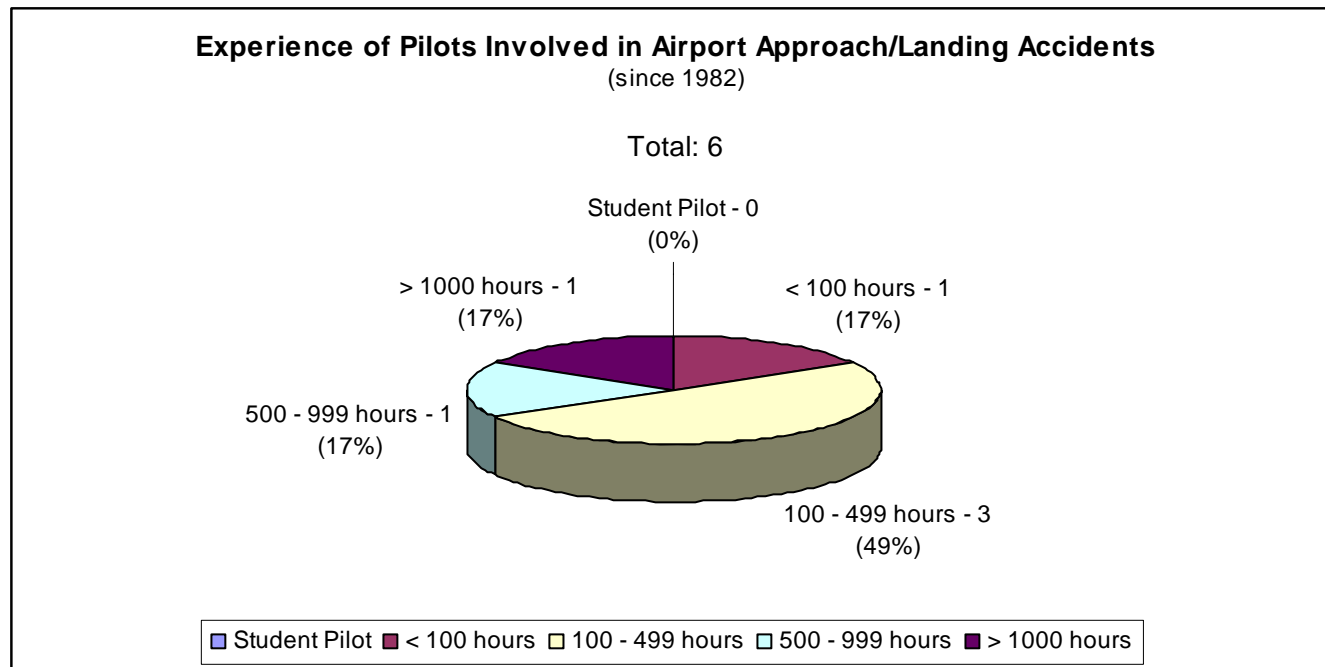


■ Student Pilot ■ < 100 hours ■ 100 - 499 hours ■ 500 - 999 hours ■ > 1000 hours

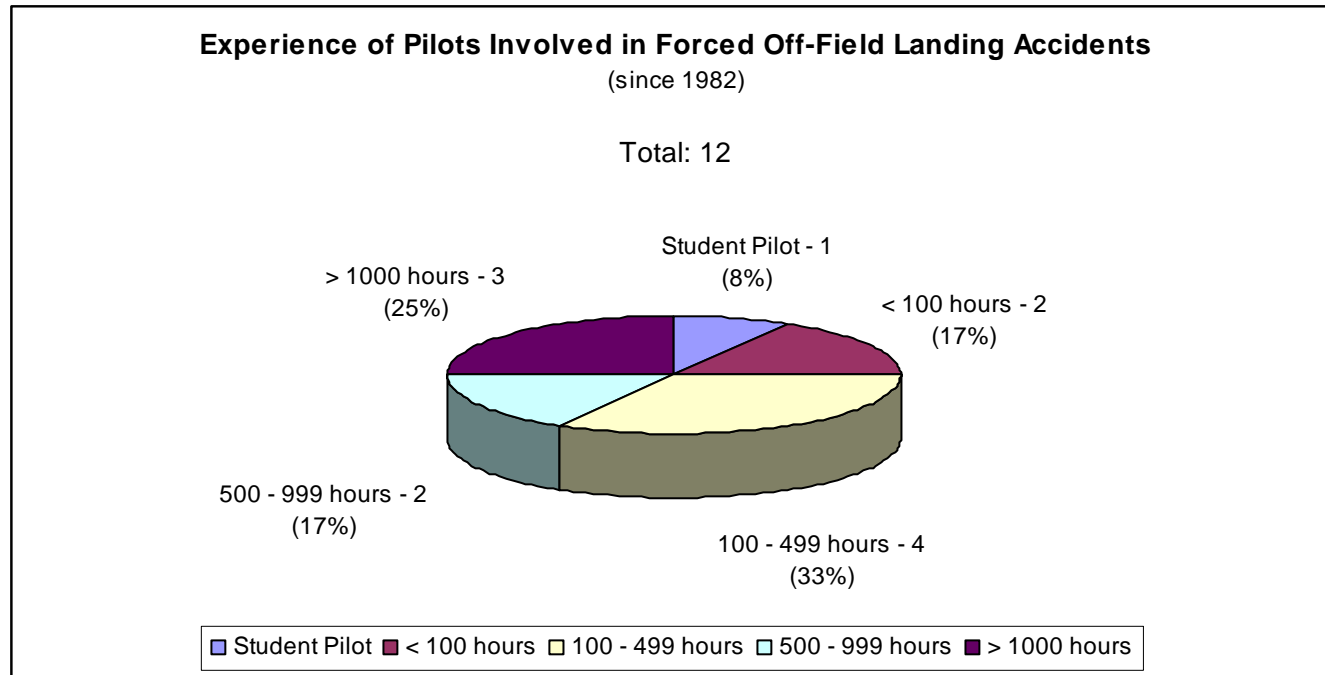
New Mexico Glider Accidents



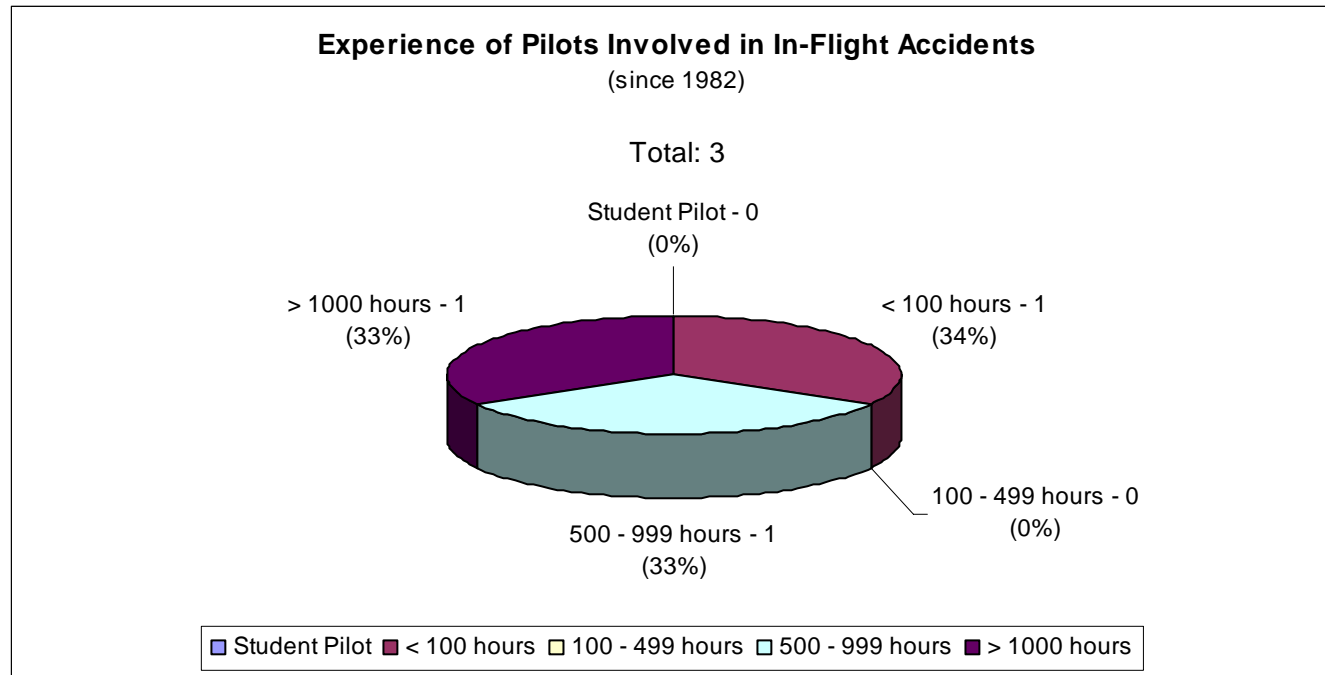
New Mexico Glider Accidents



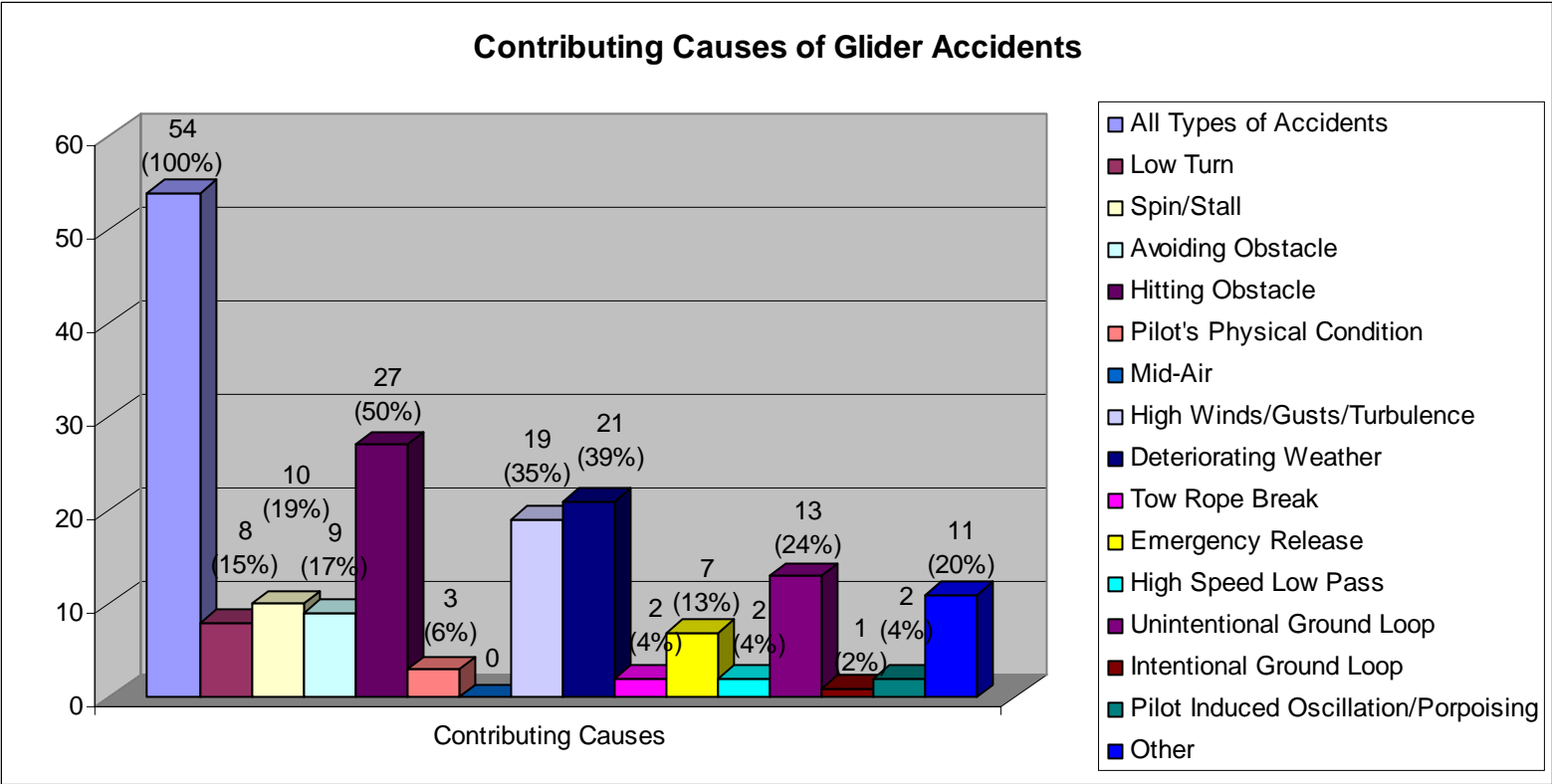
New Mexico Glider Accidents



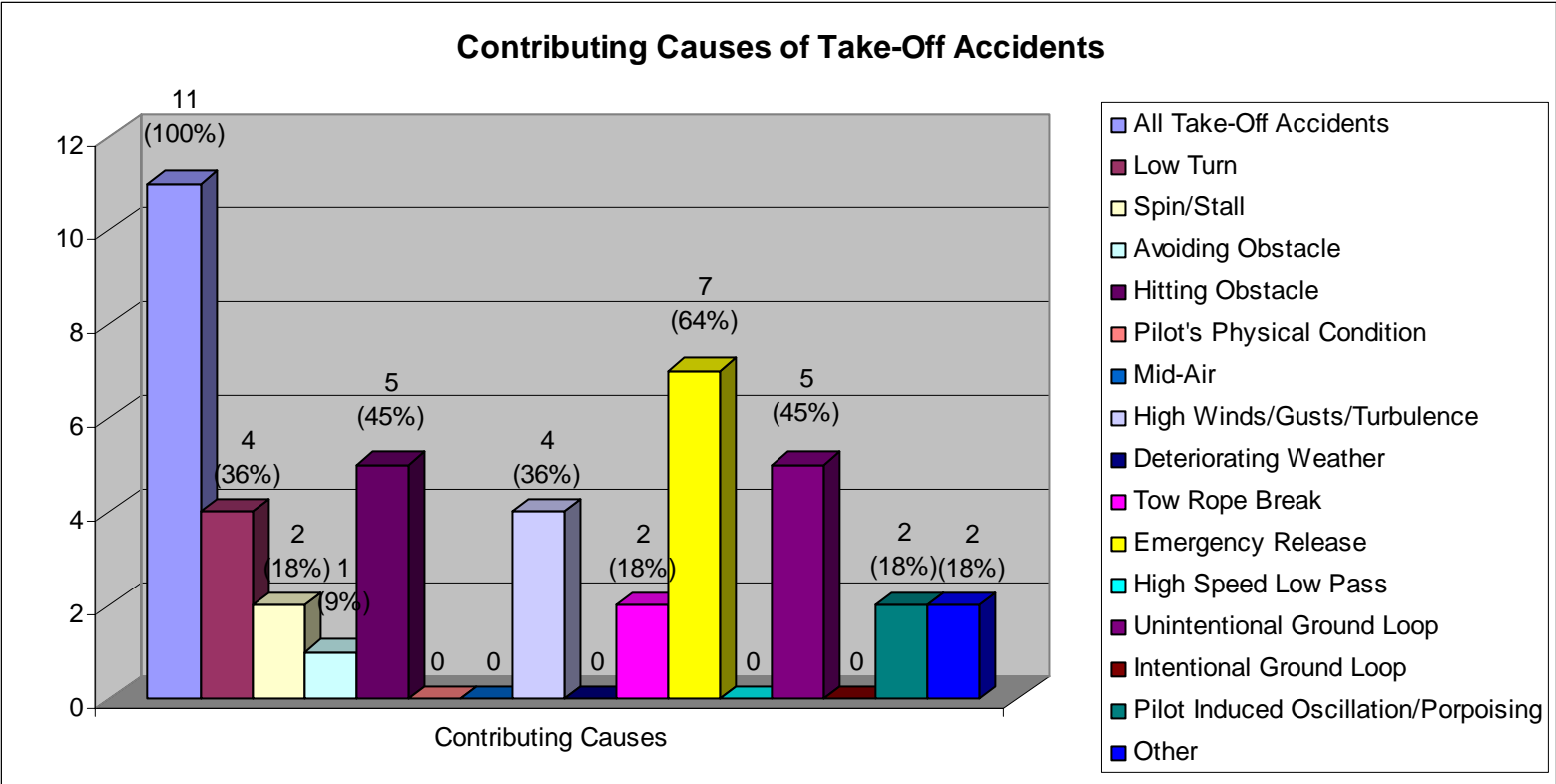
New Mexico Glider Accidents



New Mexico Glider Accidents



New Mexico Glider Accidents

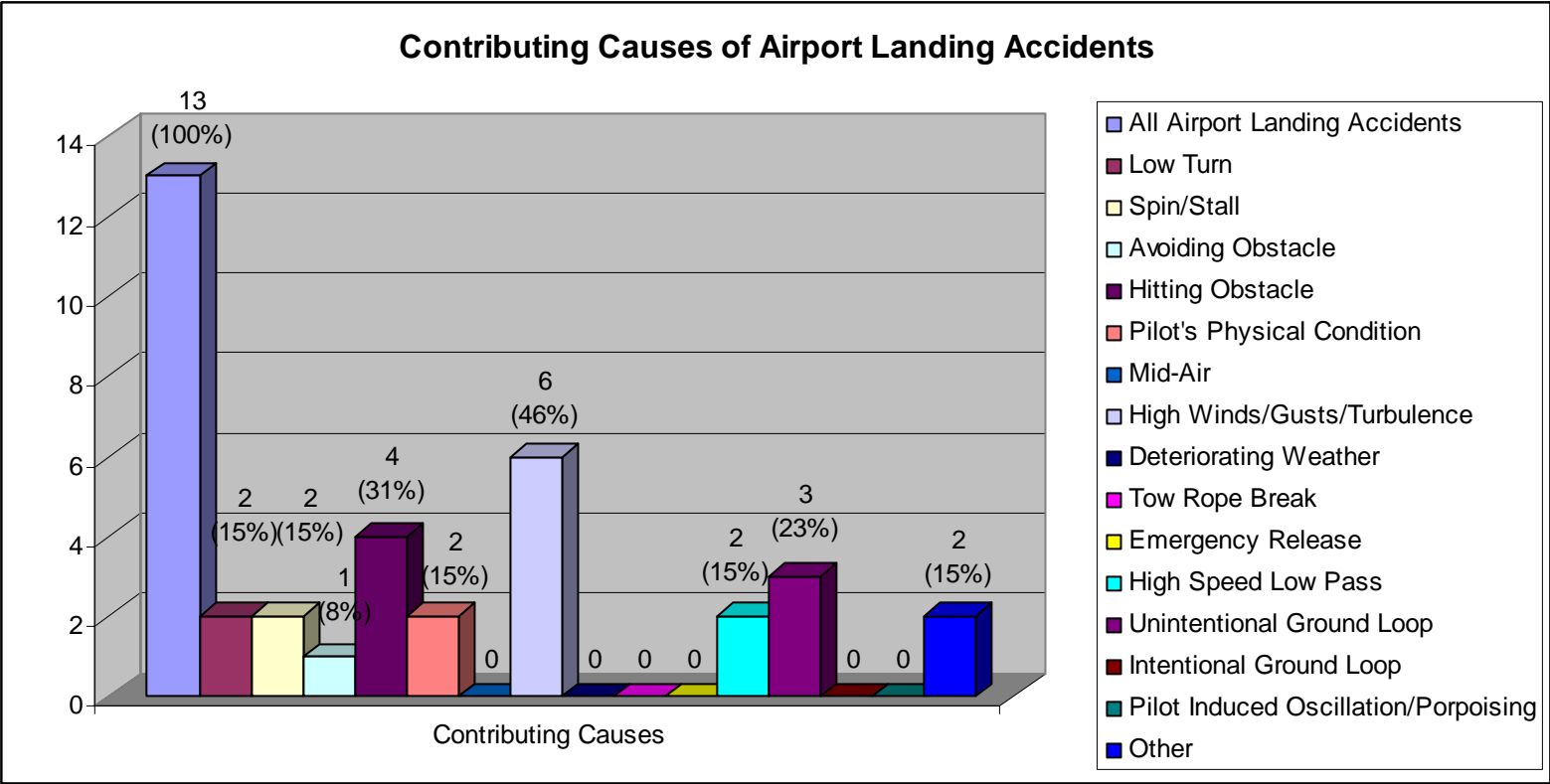


New Mexico Glider Accidents

Take-Off

- 11 take-off accidents reported
- 7 (64%) involved an emergency release
- 5 (45%) involved hitting an obstacle.
- 4 (36%) involved a low turn leading to:
 - 3 ground loops due to a wing impacting the ground.
 - 1 stall.
- 2 (18%) a tow rope break
- 2 (18%) Pilot Induced Oscillation or porpoising.

New Mexico Glider Accidents

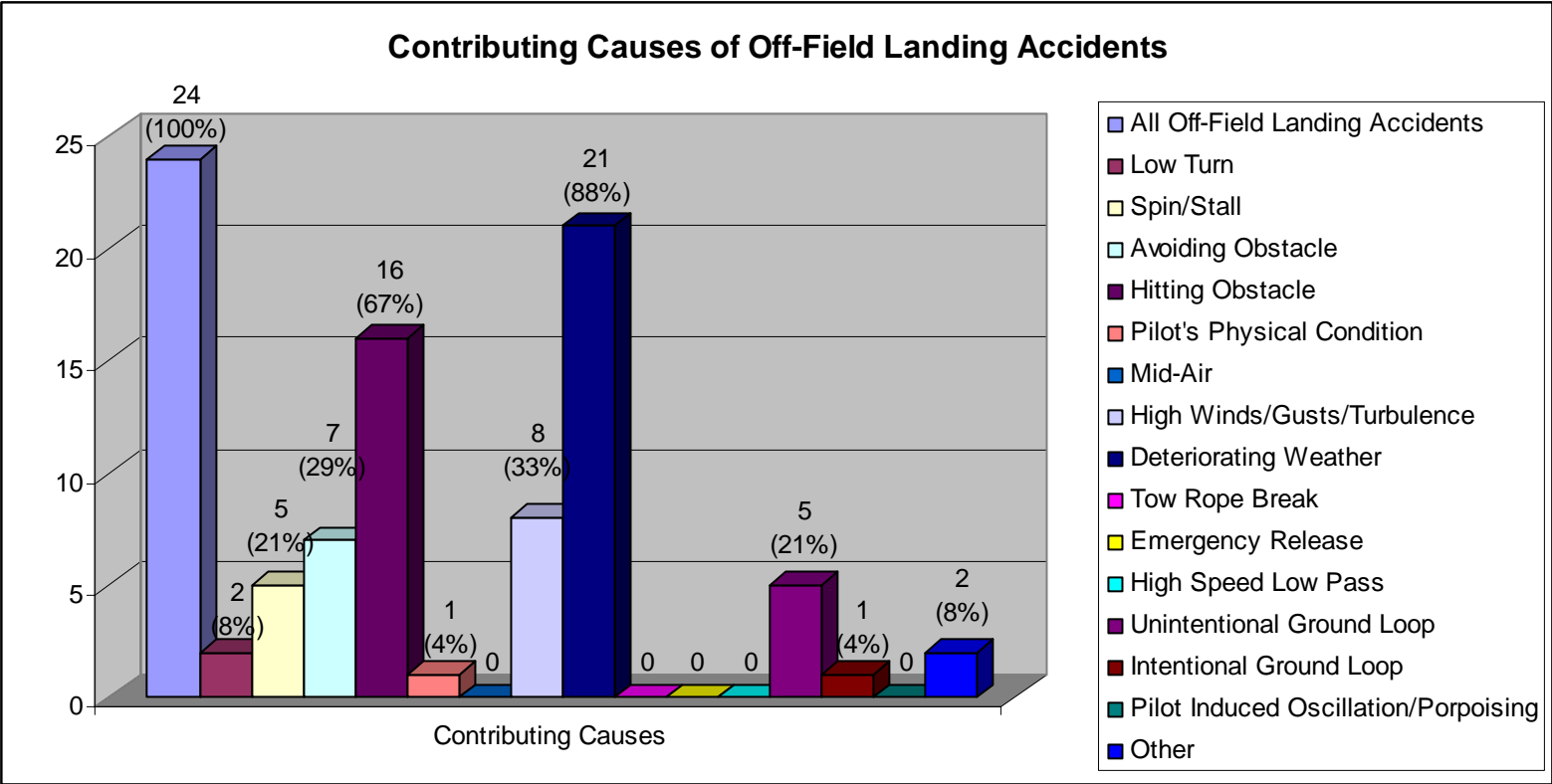


New Mexico Glider Accidents

Airport Approach/Landing

- 13 airport approach/landing accidents reported.
- 3 (23%) involved a low turn leading in all cases to a ground loop due to a wing impacting the ground.
- 4 (31%) involved a stall/spin.
- 2 (15%) involved a low pass.

New Mexico Glider Accidents

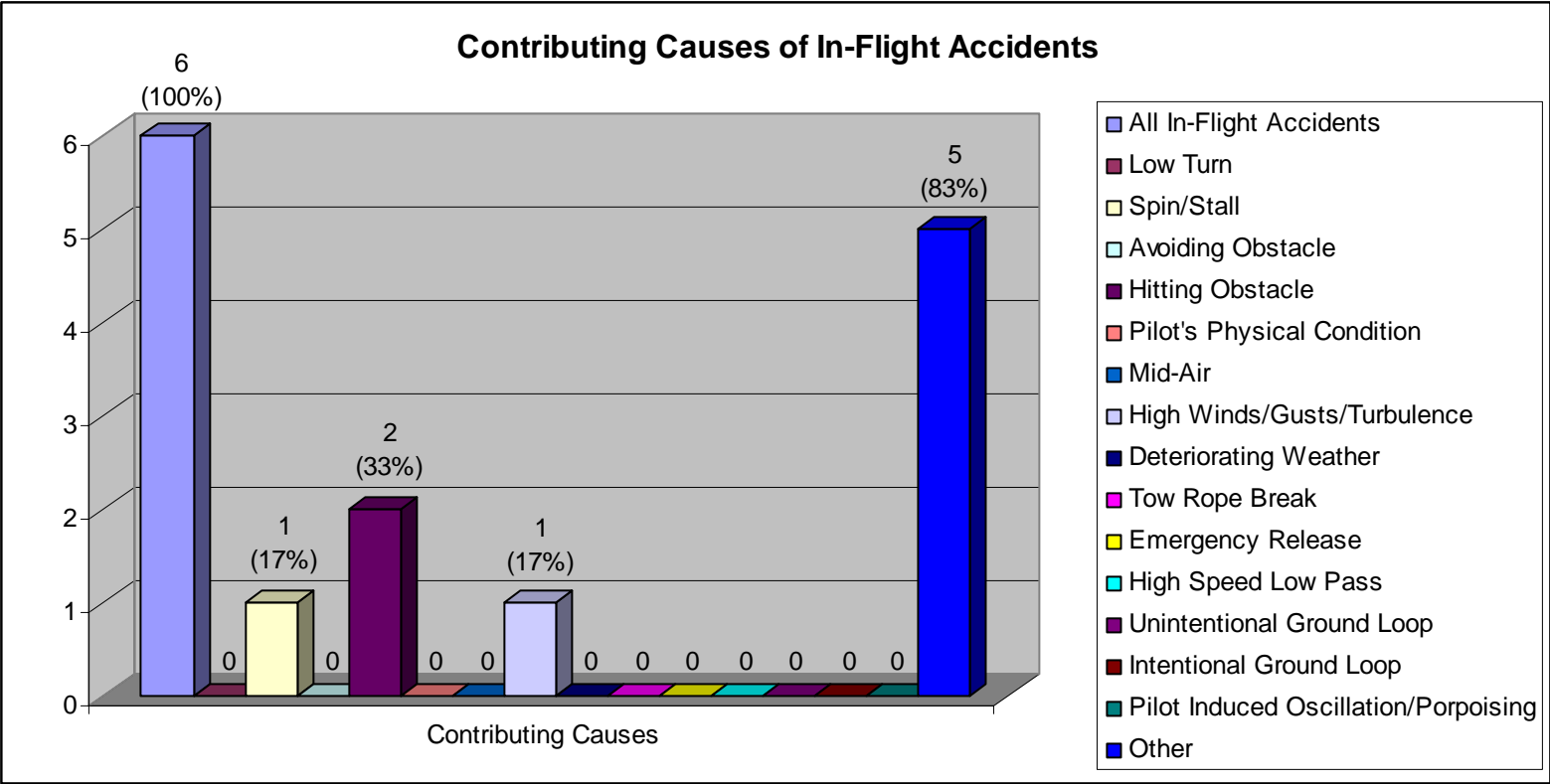


New Mexico Glider Accidents

Off-Field Landings

- 24 forced off-field landings reported.
- 23 (96%) involved avoiding or hitting an obstacle.
- 5 accidents (21%) involved a stall/spin.
 - 4 were triggered by an attempt to avoid an obstacle.
 - 1 was triggered by loss of lift due to wind gusts/turbulence.

New Mexico Glider Accidents



New Mexico Glider Accidents

In-Flight

- 6 in-flight accidents reported.
- 2 (33%) involved ground impacts during ridge soaring.
 - 1 was caused by a stall in turbulence close to the ground with insufficient altitude to recover.
 - 1 was caused by distraction and a turn in an attempt to watch deer.
- 1 involved the impact on an elevated mesa after take off and retraction of engine.
- 1 involved a bail-out triggered by loss of control of the glider due to jammed controls.
- 1 involved an unexplained straight dive into the ground after tow release at designated altitude.
- 1 was caused by structural failure of a glider prototype in flight.

New Mexico Glider Accidents

High Winds/Gusts/Turbulence

- Contributed to 6 of 13 (46%) reported airport approach/ landing accidents.
- Contributed to 8 of 24 (33%) forced off-field landings.
- Contributed to 4 of 11 (36%) take off accidents.

New Mexico Glider Accidents

Moriarty's Recent Statistics

- 3 of the 4 glider accidents reported in New Mexico (or 75%) over the last 3 years.
- 2 involved take off emergencies with early release due to wind gusts/turbulence and a subsequent ground loop due to a low turn and a wing impacting the ground.
- 1 occurred during final/touch down and involved a stall probably caused in part by wind gusts/turbulence and resulted in serious injury of the pilot.

Could It Happen to You?

- You are in your Discus 2 (stall speed: 38 kts)
- Wind: 125 degrees @ 18 kts
- You are taking off on a tow from Runway 8 (not 26!)
- A sudden turbulence catches your glider and snaps the tow rope
- You are close to the end of the runway
- Your left wing dropped a bit
- Altimeter reads 6410 feet
- IAS reads just above 40 kts
- What would you do?
- How long did it take you to decide?

The End of Runway 8

Are you still sure that is exactly what you would want to do?



Have you heard of them?



Helmut Reichman - Pioneer of modern cross-country flying, author of the bible of cross-country flying “Cross-Country Soaring”. 3 time World Champion, multiple German Champion and co-founder of the Barron Hilton Cup soaring competition involving the best glider pilots in the world.



Klaus Holighaus - Owner & manager of Schempp-Hirth, designer of the Cirrus, Standard-Cirrus, Janus, Nimbus-1/2/3/3D/4/4D, Ventus1/2, Discus and Duo-Discus gliders. 3 time European & 6 time German Champion, finished in the top rankings of all 9 World Championships he has competed in, 16 World Records.



Gilbert Gerbaud - 1993 15m World Champion as well as European and French Champion. French Record Holder.

Nobody is perfect...



Helmut Reichman - was killed in 1991 at the age of 40 in a mid-air collision in Southern France after returning from a successful cross-country flying lesson with pilots from the German Junior National Team.



Klaus Holighaus - Lost his life in August 1994 at the age of 54 in a fatal gliding accident in the Swiss Alps during one of his (non-competition) cross-country flights. At the time of his death, Klaus Holighaus had logged 8,168 hours in gliders.



Gilbert Gerbaud - Was killed here in New Mexico in 2001 (after 5430 hours in gliders) together with another very experienced pilot (3249 hours in gliders) in a Nimbus 3DM in a fatal accident at the beginning of a (non-competition) cross-country flight near Alamogordo.

Have you heard this before?

*"The most dangerous part of gliding
is driving to the airport"*

- I did, the first time when I started gliding in Germany in 1991.
- In fact, I made a similar comment to one of the visitors that were asking me about gliding while doing Ops on July 9th, 2005 - the day of the Grob accident...

"The most dangerous part of gliding is driving to the airport"

Bruno Gantenbrink, 1989 15m World Champion and multiple European & German Champion, decided, that for a presentation for the celebrations of the 51. German Soaring Day in 1993, he'd have a closer look at this statement for himself (quote):

"To do this I have made up three lists. The first list is the names of comrades that I have lost in flying. The second list is the names of friends that I have lost through accidents on the way to the airport either in a car or on a bicycle. And finally, to make the picture complete, the third list contains the names of glider pilot friends that I have lost in any kind of traffic accident anywhere."

"The most dangerous part of gliding is driving to the airport"

This is what Bruno Gantenbrink found out for himself in 1993 (quote):

"The first list, of friends lost flying, contains about 30 names. ..."

"Now the second list: there is no one. I haven't lost any friends on the way to the airport. And I was somewhat surprised to find that for me, the third list of pilot friends whom I have lost in traffic accidents is also empty."

In the last 20 years we have lost 3 world champions ... from the total of approximately 30 world champions. In the last ten years, we have lost three former German national champions out of the less than 30 we have ever had. It would appear that I have about a 10% chance of joining them."

I'll leave you with some of Bruno's further reflections (quote):

"Gliding is more dangerous than anything else that I do or know about in my life. Why don't I quit? A good question. One reason I don't quit is because it affords me more fun and pure joy than anything else I could imagine.

There is a second reason which is more decisive and that's why I'm giving this talk. I believe that gliding is not intrinsically dangerous. It is the way it is practiced that makes it so. It could be much less dangerous if we were more aware of its dangers and behaved accordingly. Sadly, we don't do this. I am very aware of how dangerous gliding is and take care to act on this awareness. Because of this, I hope to beat the odds. If I didn't have this hope, if gliding were as dangerous as the odds make it appear, then I would quit immediately.

Almost all the soaring friends I have lost, have been killed due to "pilot error". Some of these errors have been silly little things, the simplest kinds of carelessness with fatal consequences. They died because at the critical moment, something else was more important than flight safety.

If soaring is to become less dangerous than it is today, simply taking different precautions won't do any good. The basic attitude must change. And the attitude can only change when we realistically evaluate the danger every time we fly. That is why I have fought against the thoughtless use of the saying that "the most dangerous part of gliding is driving to the airport."⁶³