

## Accidents That NEARLY Happened; And What Stopped Them...

#### **Panelists**

Hans Van Weerch - The Rosachi Incident...

Peter Deane

The Great Carrot Patch Escapade.

Ramy Yanetz

- Wave Incidents....

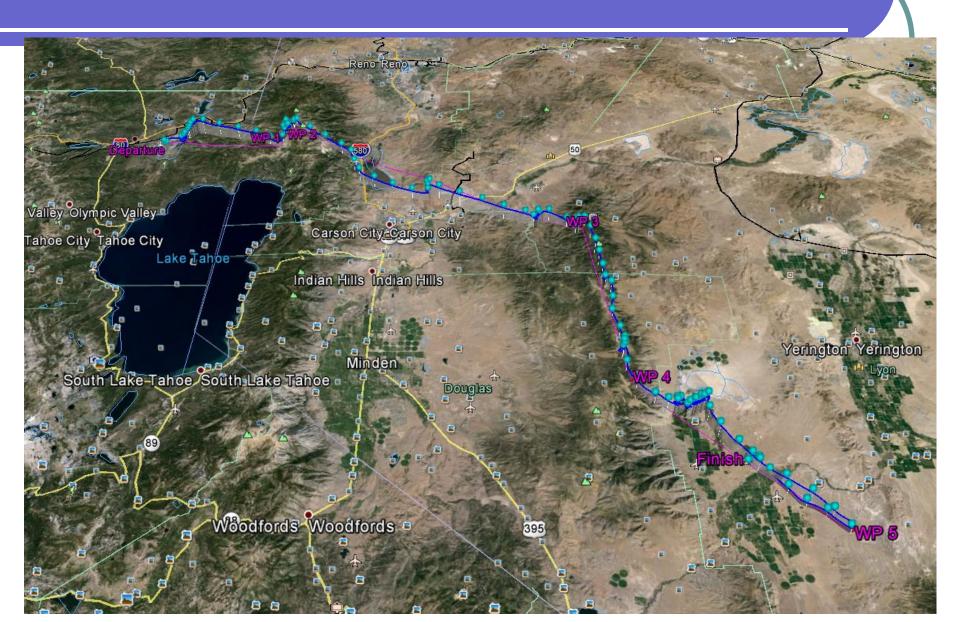


## The Rosachi Incident That Did Not Happen

Or how a bunch of small, seemingly unrelated issues nearly accumulate to a disaster.

By Hans Van Weersch, 3U

## Flight Path



- Sunday, August 28, 2011
  - Strong forecast prompting water ballast
  - Busy day at Truckee, short on line crew
  - Minden TFR due to air show
  - Late start
  - Catching up to leaders

#### Take Off

- Busy day, hot, high density altitude.
- Short on line crew.
- Heavy with water.
- New line boy, in-experienced with deep hook.
- Out of cockpit, hooked up self.
- Low, but uneventful launch.
- Forgot release checklist.

- Getting Going and Catching Up.
  - Good reports of lift mid of Pinenuts.
  - Minden TFR keeps us to the East.
  - Single dissipating cloud mid of Pinenuts.
  - Lower than usual lift on Pinenuts.
  - Clouds and reports of 18kft on Sweetwater range.
  - Deciding to push forward despite low altitude.

- Losing it and Retreat.
  - Arriving at Sweetwater foothills far too low.
  - Nearly under 18kft clouds.
  - Pushed forward until zero margin.
  - Unable to connect.
  - Retreat to Rosachi.

- Arrival at Rosachi Setting up for landing.
  - Arriving low at Rosachi.
  - Partial landing check list, operate gear.
  - Choose between closed paved and overgrown dirt runway.
  - Spend too much time to evaluate and decide.
  - No altitude for decent pattern.
  - Out of position for final approach.
  - Need to make 270 ° turn into rising terrain.

- Landing at Rosachi.
  - Out of 270 ° turn very low to terrain.
  - Speed, Speed, Speed.
  - Lined up for very short final to closed paved runway.
  - Pull spoilers over threshold at 20 ft.
  - Alarm
  - Fortunate to be able to establish wheel alarm due to retracted gear.
  - Lowered gear and landed seconds later.



#### The Great Carrot Patch Incident

#### Peter Deane



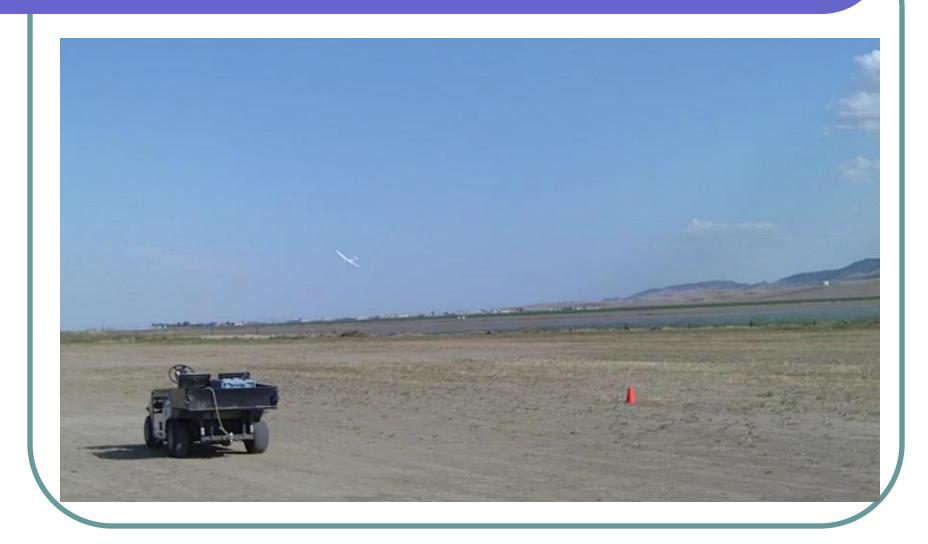
## Situation

- Avenal Contest finish May 14<sup>th</sup> 2010
- Normal finish to the south with a pullup and compressed pattern to land to the north.
- Benign wind and weather
- Done it a million times.

## As it Happened...

- Hit unusually strong sink at turn from base to final – put everything away and put the nose down but still sinking like a '57 Chevy –WHY?
- Decision point point at the ground, keep airspeed up and put it into the field to the south. Don't stretch it to clear the fence..
- As I got to into ground effect I had rapidly increased airspeed and energy...

## Morgans Video – Starts well into the problem.



## Analysis

- Check the video New carrot patch over base and final with cold sprinklers across whole field on a hot still day
- Reverse convection exactly in the same path as my compressed pattern.
- Ground effect with enough energy to safely pop over the fence and land.
- Key Decision point was whether to stuff it in the dirt or use the new energy to stay airborne. I was right on the cusp of landing when I notice my 'new' high airspeed.

### Lesson - DON'T PANIC!



# Wave Incidents....and my Accident that did not happen

Ramy Yanetz

## Key Risks of wave flying

- Strong/cross/turbulent/gradient winds
- Extreme turbulence Unusual attitudes, overstressed equipment
- Extreme sink and/or headwind may not be able to make it to a safe landing place.
- Greatly reduced VNE at altitudes.
- Oxygen system limits/failure hypoxia and loss of consciousness (3-6 minutes at 25,000 feet, 1-3 at 30K)

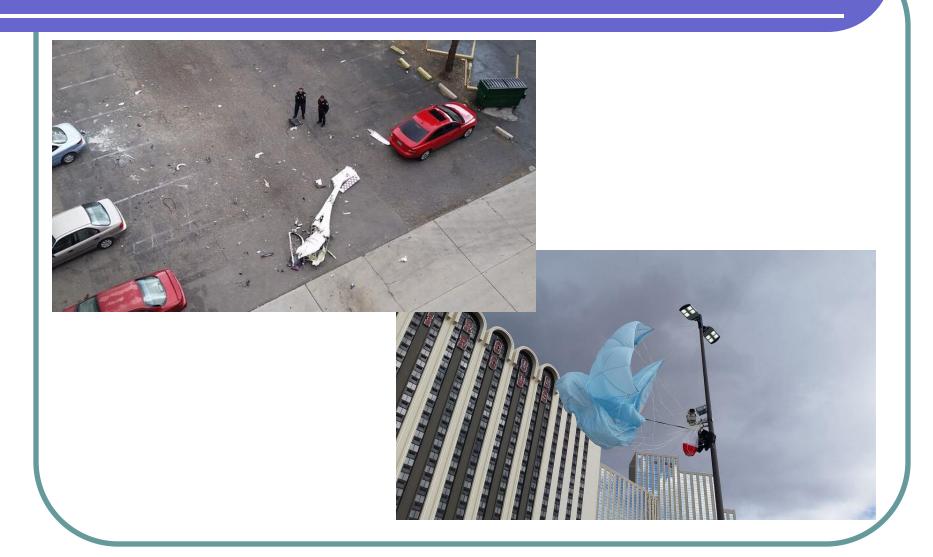
## Risks of wave flying (continued)

- Icing on wings, canopy. Canopy frosting.
- Frozen control, especially spoilers...
- Extremely dynamic weather
- Mountain obstruction
- Greatly reduced number of optional land out spots due to excessive crosswinds.
- Risk of getting caught on top of cloud or engulfed in cloud – only way down is through cloud.
- Not having proper instrumentation and experience for inadvertent flight into clouds

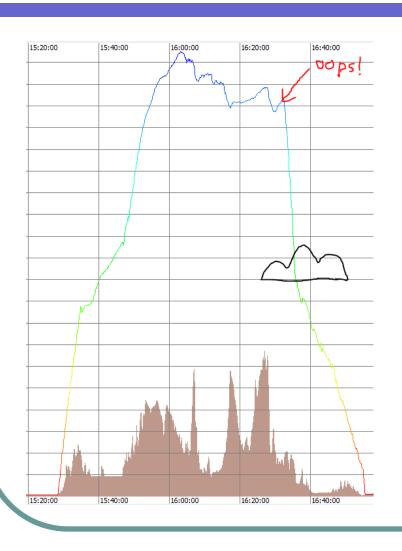
## Results of inadvertent IMC

- 10/14/2015 Mt Washington wave camp gap closed below, pilot decided to bail out
- 4/5/2015 Reno Inadvertent IMC Glider broke over downtown Reno – Pilot bailed out successfully
- 10 years ago another breakup and bailout over Reno due to inadvertent IMC
- 5 years ago breakup in wave over Hawaii probably due to O2 problem – fatal
- 10+ years ago break in wave over Minden due to IMC or O2 – fatal

## Results of inadvertent IMC



## My Accident That Almost Happened



- 4/10/2010 Byron wave
- gap closed below while at 10K
- 1 minute descend through at least 1000 feet of cloud layer with full spoilers at 80-90 knots
- Used my Trutrak electronic
  T&B to keep wings level
- Popped out below the cloud at 5000 feet

## Conclusions

- To fly in wave be aware prepare for the risks.
- Install an electronic T&B such as Trutrak (\$500)
  <a href="http://www.aircraftspruce.com/catalog/inpages/trutrak3.">http://www.aircraftspruce.com/catalog/inpages/trutrak3.</a>
  <a href="php">php</a> or similar instruments
- Nowadays also available as add on to flight computers
- Use it only as secondary insurance against inadvertent
  IMC in wave and convergence flying
- Get some under the hood IFR training

## 178 Seconds to Live....



## QUESTIONS??