Pilot Skill Development Advice

Panelists (15 mins each)

Buzz Graves	- Mental Readiness for XC
Kenny Price	- Stick & Rudder and Thermalling
Sergio Colacevich	- Improving Cross Country Skills

Q&A - All (15 mins)

Mental Readiness for XC Soaring
Buzz Graves

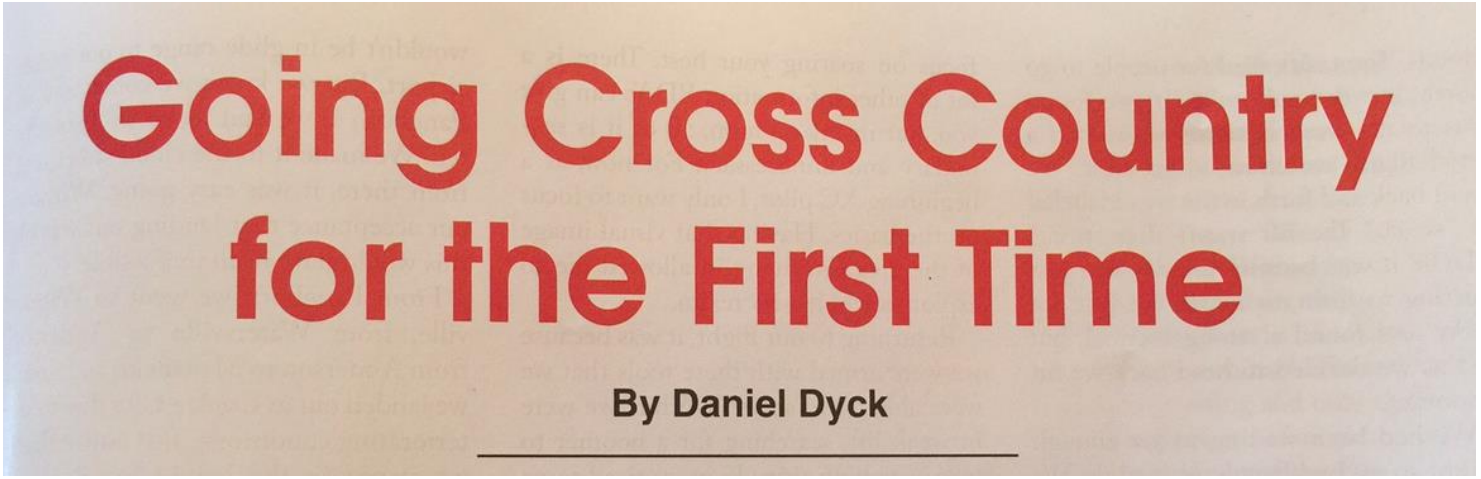
" It is perfectly OK to land out"

"Willing and Ready to Excepting the Risk"

"What Levels of Risk are in Your Control"

Buzz Graves, CFIG for 34 years and XC lead pilot for the last 15 years at ASL, 1-26 jockey, own DG 800b

Recent Article in Soaring, 18 yrs old



Going Cross Country for the First Time

By Daniel Dyck

eration. What I'm about to say is probably the most important thing for new pilots who want to transition into XC. It's okay to land out! Seriously – that's almost one of the best parts of the sport!

Excepting and Managing Risk

Excepting the Risk “Past and Present”

- Past
  - Required a good, well trained chase crew with a radio
  - No cell phones
  - No GPS
  - No flight computers or desk top computers
- Present
  - GPS satellite based real-time tracking (SPOT, InReach…)
  - Flight computers
  - Google Earth for planning
  - Cell phones
  - OLC and Dr Jack
  - All amazing advancements that have made the XC experience safer than ever before!!!!!!!

Three Simple Land out Plans

- Plan A
  - Only consider landing at airfields you can aero tow from, then progressively local soar each
- Plan B
  - Only consider known good fields, local soar each
- Plan C
  - Rely on your abilities to pick a good field from the air in real-time, most advanced, more common in some places, local soar your choice

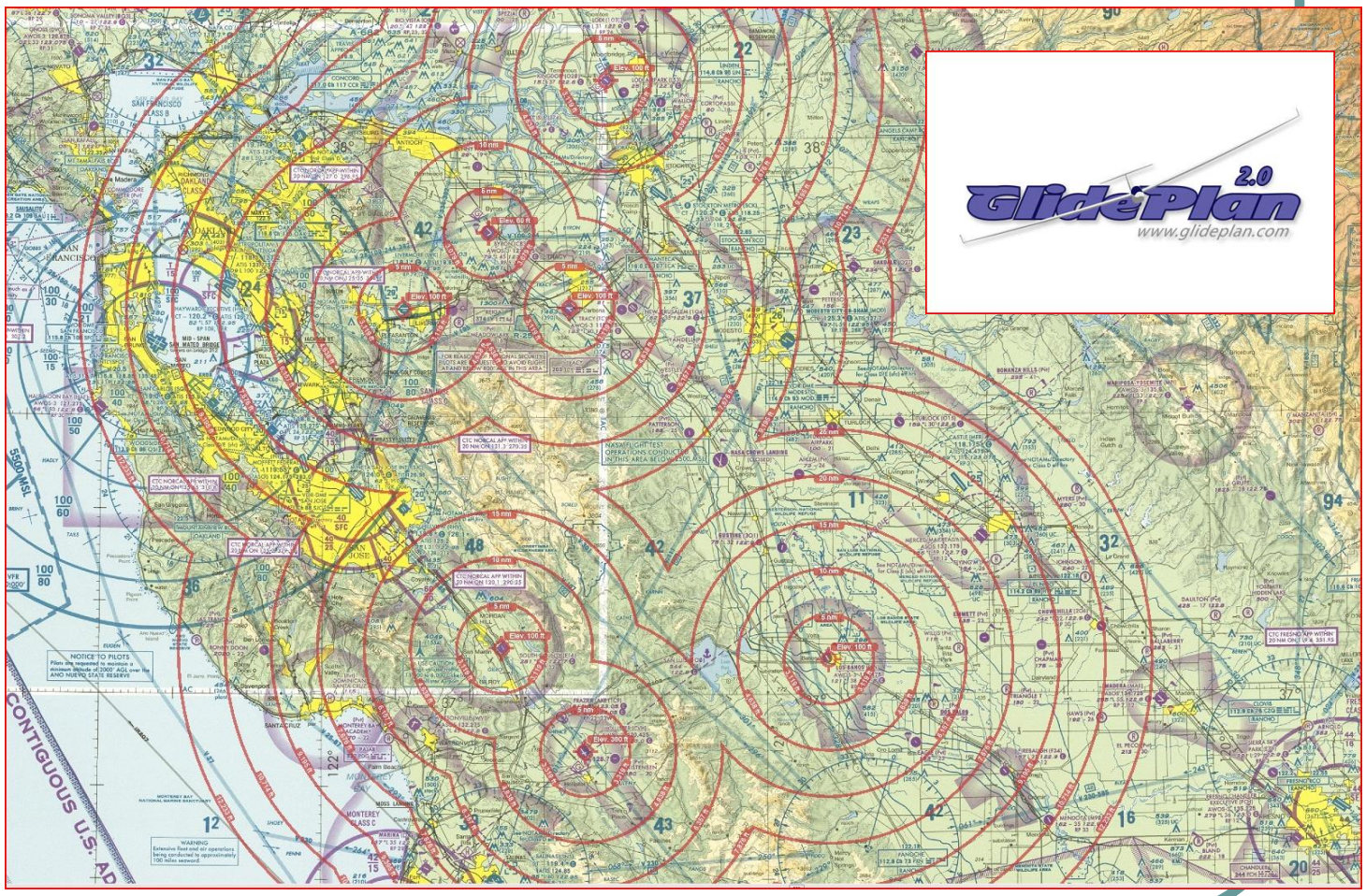
Excepting the Risk

- Plan A, aero tow only
  - Extra Time, tow plane? and $$
- Plan B, known good fields
  - Extra Time, $$$$, crew or the ER self retrieve method (Emergency Retrieve or ..)
- Plan C
  - Extra Time, $$$$$$, crew, higher risk of damage to you and your plane, unfriendly reception, etc…..lots of unknowns

Plan A for Byron

Aero Tow only

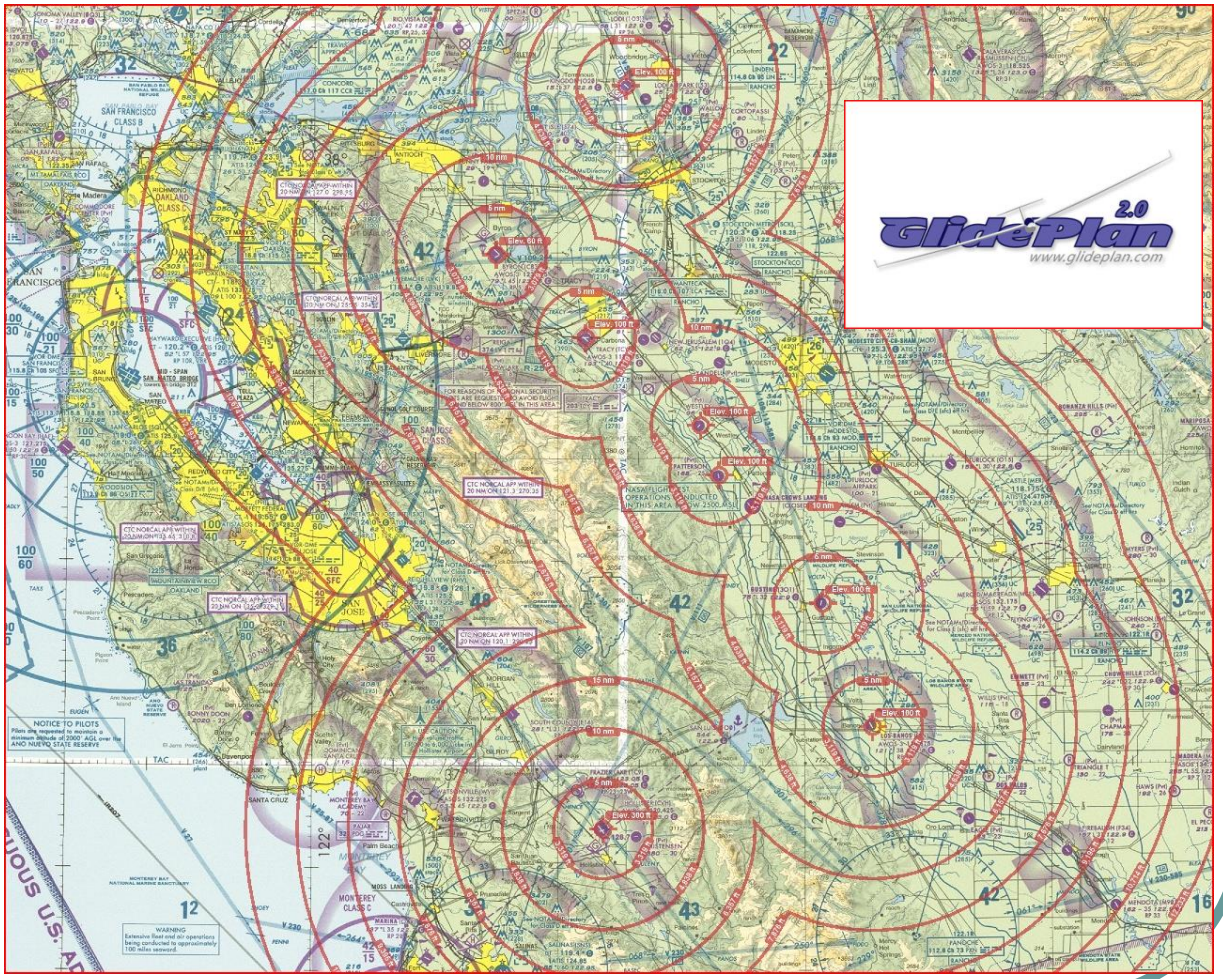
Byron
Tracy
New Jerusalem
Rio Vista
Los Banos
Hollister
Livermore
Concord



Plan B for Byron going South

Known good Fields
(updated yearly
Hollister Data Base)

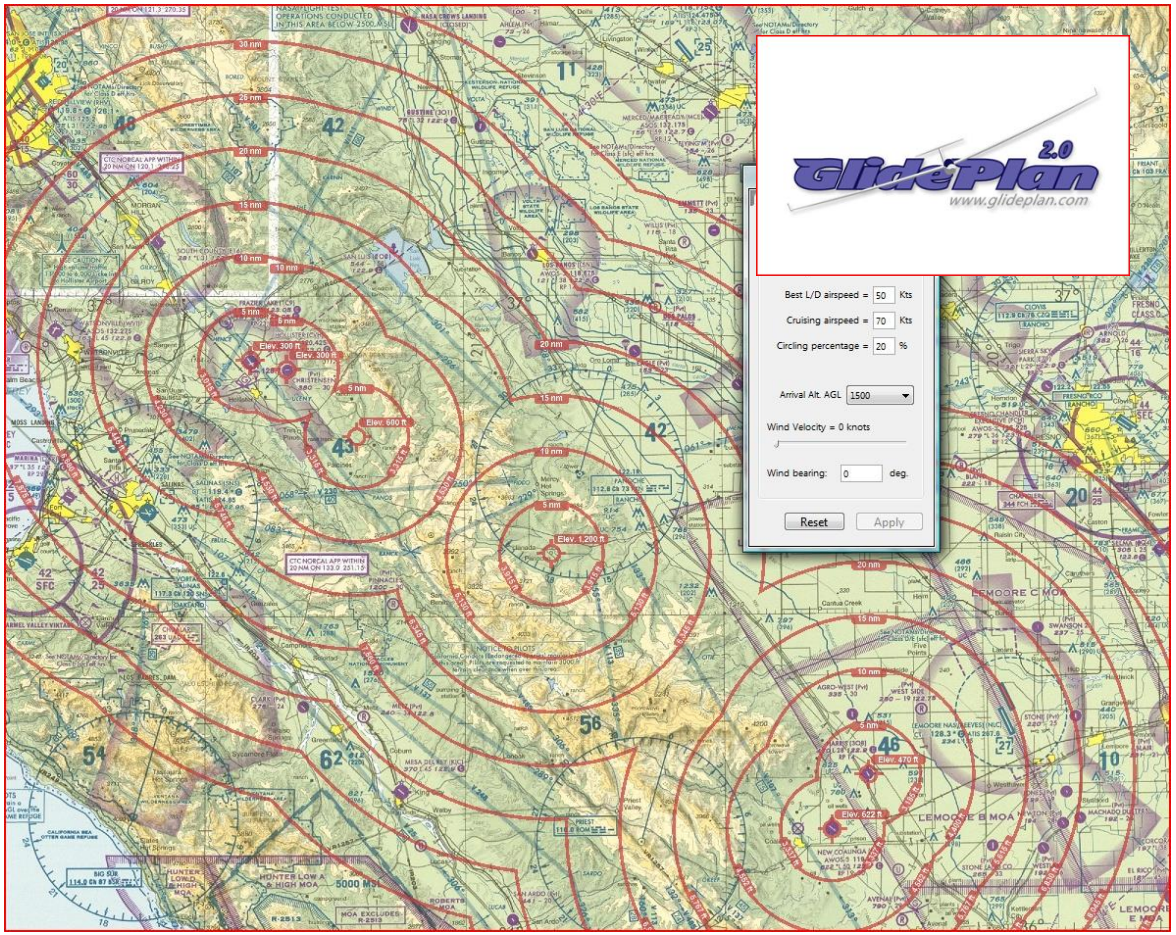
Byron
Mtn House Road
Tracy
Rio Vista
Funny Farm
New Jerusalem
San Antonio Valley
Westley
Patterson
Santa Nella
Los Banos
Hollister
South County
Little Panoche
Cotto



Plan A for Hollister

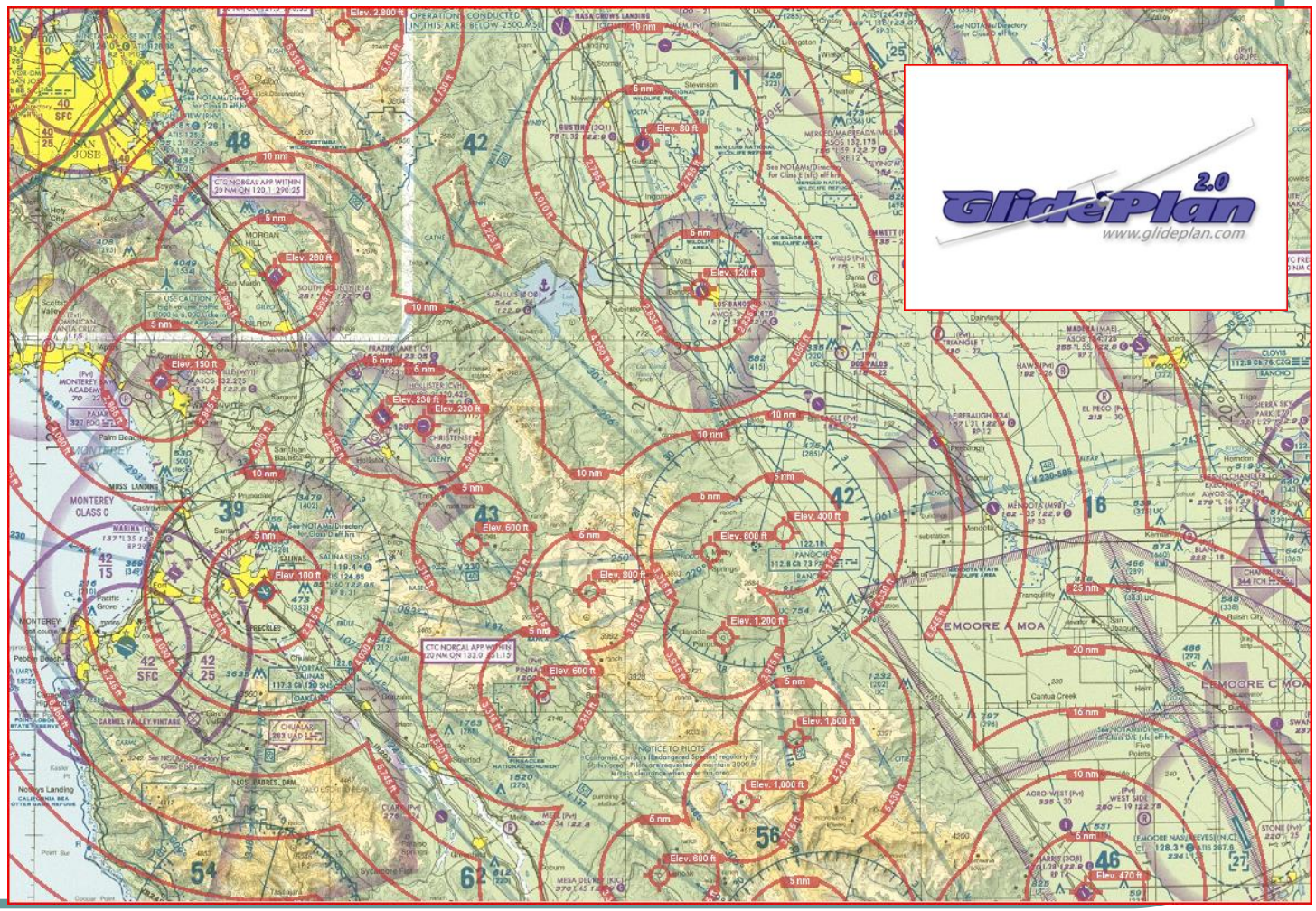
Aero tow only

Hollister
Christensen
Bickle
Panoche
New Coalinga
Harris Ranch
Avenal



Plan B for Hollister

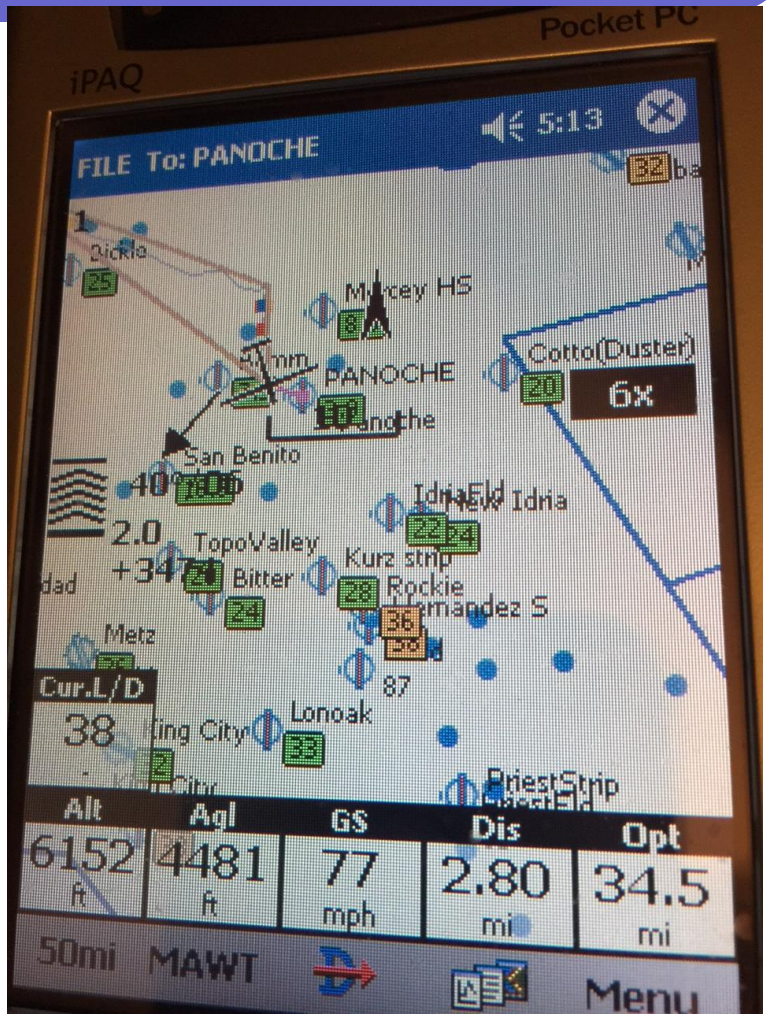
Hollister
Christensen
Bickle
Salinas
Watsonville
South County
Bumm
Panoche
Pacines
Hernandez
Harris Ranch
Avenal
Preist
Lonoak
New Idria
Etc…..



Flight Computer Display

SeeYou Mobile

- Green is within glide
-
- Number is required L/D
- Yellow is marginal
- GoTo with altitude margin



Mental Readiness for XC Soaring

- Tears and Fears Management
- Be willing to accept landing out is a possibility
- Choose a Plan that fits your skill level, comfort zone and expectations
- Most of all “ Landing out is OK”
- Be safe, make sure you and your hardware will and can fly the next day!!!!

Stick & Rudder and Thermalling Skill Development

Kenny Price

First soloed at Lagoon Valley – 1990

Received Commercial and CFIG – 1993

Crazy Creek

Chief Pilot for Williams Soaring Center

1995 -2008.

Good Stick and Rudder Skills

- Good Stick and Rudder skills are the most important skill that a glider pilot has.
- Without them, the best case scenario is flying inefficiently and the worst case can be dangerous.
- Keeping the Yaw String straight is just one of the aspects of flying the glider.

SLIPS and SKIDS

- What are the differences of a slip versus a skid.
  - When do we use a slip?
  - When do we use a skid?
- Which of these can be dangerous?
- How can we use slipping flight in our thermal flying?

Slow Flight and Stall Recognition

- Practice flying Slow flight and performing recognition stalls.
- This forces the issue of flying coordinated and enhances the pilots stick and rudder skills and airspeed control.
- Practice Dutch Rolls and turns to a point.
- Confidence building is important.

Airspeed Control

- Having the ability to fly consistent airspeeds are very important in glider control.
- Flying airspeeds that fluctuate will enhance a non stabilized flight characteristic that create a higher workload for the pilot in all realms.

Airspeed in the Thermal

- Use the airspeed indicator for reference only.
- Learn to keep your eyes over the nose.
- Use the Horizon as your airspeed reference.
- Use feel, sound and sight picture.

- Once you have mastered these references, Thermalling will be easier.

Thermalling

- Successful Thermal Soaring requires us to have the knowledge to locate thermals, and then utilize them.
- Thermal flying requires the pilot to be more aggressive with the sailplane.
- But at the same time, fly with a light touch and smooth stick movements.

Common Thermaling Mistakes

- Turning too soon/Turning too late.
- Airspeed too slow/ too fast.
- Not recognizing workable lift / non workable lift.
- Not moving on / Leaving too soon.

Thermalling Stick and Rudder..

- The importance of good Stick and Rudder skills are multiplied when thermal flying.
- Good airspeed control is mandatory.
- Staying observant for other traffic at all times.
- Knowing how to use the instruments in the sailplane that you are flying.

Closing

- Take the time to Master the art of good Stick and Rudder skills and you will reap the benefits as a Safe and Confident Sailplane pilot.

Better Cross Country Skills and Racing

Sergio Colacevich

Be Active

- Be active: the more you fly, the better you become.
- Check the weather during the week.
- Go fly even when the weather is forecasted as mediocre.
    - You learn more..
    - And it may be better than forecast!

Set a goal for the day

- Goal task: “I want to get to Mammoth A/P today”
  - In Truckee we give “A”, “B”, “C” tasks every weekend)
- Theme task:
  - “I want to improve my speed today”
  - “I want to improve my thermalling technique today”
- OLC task:
  - “Fly for the most distance attainable today”

Fly with better pilots

- Using your own glider (PASCO 2015 and 2016 initiative)
- Using a two-seater (in your Club or in Truckee)

Study the flying technique, Study the weather

- The Soaring Society of America and other glider sites have the book “Cross Country Soaring” by Helmut Reichman. It explains very well everything one needs to know about technical soaring.

- Study meteorology. Soaring sailplanes is meteorology. The best book ever written is “Meteorology for Glider Pilots” by C.E Wallington. It is no more sold new, it has to be bought used in Amazon or Ebay or in other glider sites.

- You can get these two books and forget about all the others.

Racing

- Make a “Task” flight for yourself and aim for speed
- Race with/against your buddy (Ramy, Buzz, Eric)
- Get into a local contest:
  “Vsa Race Series” in Williams
  “Sports Class Contest” in Air Sailing
  “TAGARs” in Truckee
- Get into a Regional contest: (Minden, Montague, Truckee)

Why Racing

- Become a better pilot
- Compare yourself to others and learn from others
- Discipline of following exacting rules
- Camaraderie of other fellow pilots
- No need to win, just fly
- Just take a week out for yourself

Theory of Soaring Flight

- Helmut Reichmann developed the theory of cross country flying (dolphin flight) based on strict adherence to MacCready values.
- Practical application of the theory revealed that to avoid too many low points is better to fly at 2/3 or 1/2 of the theoretical MacCready value.
- Further refinement is to divide the available height in three bands.
- General recommendation: rather than try to go fast, avoid going slow instead.

- Look at clouds, terrain, wind. Look a lot.

Dolphin Flight