



Skywriter

Monthly Newsletter of the Calgary Ultralight Flying Club

March 1998

Across the Wing

by Wilf Stark

We've not had an 'Airplane Stuff' monthly meeting in quite some time. It seems, lately, that housekeeping issues have overshadowed the main reason we enjoy getting together - to share experiences and knowledge related to ultralight flying and ultralight airplanes. With that in mind, our March meeting will revolve around ultralights and flying them - so come prepared for the confession sessions, the builder's advice corner, the updates on what's new and what's no longer relevant : in other words - Airplane Stuff.

After our December meeting, a new member was overheard asking if a lot of our meetings dealt with having meetings. I haven't been able to get that question out of my mind. As important as it is to deal with annual elections, annual dinners, locale for our meetings, and the many other issues we seem to need to deal with, it helps to focus on the reason the CUFC was formed: to promote safe ultralight flight, help us become better U/L pilots, and share knowledge among all who enjoy the flying and building/buying of ultralight aircraft.

Yet, having said all that, I can feel the encroachment on our boundaries. As our aircraft become more and more sophisticated, and evolve to fly faster and farther at corresponding higher costs, we have moved away, by choice, it seems,

from the historical 'afternoon jaunt within a few miles of the home grass strip'. We enjoy radios, GPS, winter heat, a second seat for company, and the ability to go quite a distance at greater speed than by car. Is it any wonder then, that the more formalized regulations surrounding

mile radius or less, landing every once in a while for fun or reassurance. I'm oversimplifying to make a point - both types of flying bring with them joy and challenges; but if we as UL pilots expect to do both with our one skill set and our one aircraft, we had better be 'compliant' in both worlds.



Knute Rasmussen and his miniMAX. Knute's turning a 2-blade wooden GSC ground-adjustable prop with a Rotax 503.

General Aviation are sought by some to also be imposed on us? We're knocking at their back door, and they couldn't see us on Radar!

We have choices. The grass strips have not vanished. We simply need to decide which we prefer - to get to a busy strip of asphalt that's 45 miles away, in 40 minutes, or to circle our home grass strip at a 5-10

I'd like to explore this 'envelope of aircraft performance and necessary pilot skills' in future meetings, so we might learn more of how to have the best of both these worlds. That is why Ultralight Aviation fascinates me so. It allows us to aspire to both.



Dale Robinson and his miniMAX on Dave Bolton's strip. He's using a Rotax 447 for power. He designed his own canopy.

Destinations

by Andy Gustafsson

Beiseker airport is the destination for March. Easily accessible to us Ultralight aviators with a new goal in sight, it can be found approximately 3 miles east of Beiseker, just north of highway #9. The distance from Indus is 36.5 miles and your heading should read 003° magnetic. The runway (16/34) is paved and measures 2950' X 75'. (For you 'IFR' pilots, there are runway lights.) Elevation is 3036'. A new east-west grass strip has been added on the east side and intersecting halfway down the main runway!

The airport is being maintained by the village of Beiseker and is very comfortable to operate in and out of. Right hand circuits are flown on runway 16 because of parachute jumping east of the runway during daylight hours. So when using the grass strip be very cautious! Beiseker is a popular destination for a lot of G.A. pilots and if you are radio equipped, turn the dial to 123.2 at 5 miles out and tell 'Beiseker traffic' what your intentions are. If you are NORDO, follow the proper procedures. Summertime finds this airport very busy with parachute jumping and also Calgary Recreational Flight Center operates a U/L flying school here.

When five of us CUFC aircraft visited Beiseker we were enthusiastically welcomed by the airport manager. He was eagerly snapping pictures and inviting us back anytime we wanted. The CUFC squadron sure is recognized wherever they land. There is a heated trailer with a washroom open for pilots. During the busier season there is a coffee shop open. This airport is one great destination.

Happy landings.

Note: If anyone in the club has a 'Destination' that they feel should be known, don't hesitate to let me know. My phone # 247-3245.

Guest Speaker March Club Meeting

Doug Hyslip runs the RC Hangar, a radio-controlled model supply shop on Ogden Road. He's built several RC models for film and movie projects, his most recent one being for CBC's presentation last year of "The Arrow". Hyslip made two flying models for the movie (see Stu Simpson's article "The Arrow 2000 Project) in a previous issue of Skywriter.

Hyslip is now leading a project to build and fly a 60% scale model of the Avro Arrow. The project is to be completed before 2008, the 50th anniversary of the Arrow. He'll be our guest speaker in March and will fill us in on many fascinating aspects of the project.

Renew NOW!

If you haven't sent in your 1998 membership dues (\$20.00) please do so now. Otherwise you will not receive any more issues of Skywriter. Mail to Brian Vasseur, 556 Meadowbrook Bay, Airdrie, AB, T4A 2A9

Skywriter

Skywriter is the official newsletter of the Calgary Ultralight Flying Club and is published 12 times per year. Articles and letters are very welcome and should be addressed to either Bob Kirkby or Wilf Stark.

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Calgary Ultralight Flying Club
Meetings of the Calgary Ultralight Flying Club are held on the second Thursday of every month, except July and August, at 7:30 pm, at the Northeast Armoury, 1227 - 38 Avenue NE.

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"No Order too Small!"

GPS Roll Over

by Bob Kirkby

Much has been said of late about the millennium date roll over problem faced by computer software. For those who haven't been following the doomsday prophets, here's the scoop in a nutshell. Over the past 40 years computer software programs have been written to store dates in various forms and calculate the length of time between dates in various ways. Depending on the programmer's forethought and the expected life of the program, there could be a problem on January 1, 2000. For example, if the year portion of a date is stored as two digits, such as 89 for the year 1989, then the year 2000 would be stored as 00. If a program were computing a person's age and that person were born in 1955, today it would be 98-55=43. But in the year 2000 it would be 00-55=-55. The program would "bomb" upon encountering an age of -55.

If, on the other hand the years are stored and calculated using all 4 digits, 2000-1955=45, which is the correct result. Many smart programmers used Julian dates to store dates. In this case all dates are converted to the number of years and days since an arbitrary starting year, say 1940, and stored as a single integer number. For example, in this case where 1940 is our reference date, February 25, 1998 would be represented by the number 58056 (58 years and 056 days since 1940). Elapsed time can then be calculated simply by subtracting the Julian dates. As long as the date conversion algorithm is written properly the years 2000, 3000, etc. will pose no problem. Unfortunately over the past 40 years an incredible number of programs have been written (millions) and some large percentage of programmers and systems analysts either did not consider this future dilemma or did not expect their products to be around long enough.

In the past week alone I have received two letters at work from our customers demanding that we tell them exactly what steps we are taking to obviate any



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problems with the date roll over. They want assurances that their supply line will not be interrupted because Alberta Computer Cable Inc.'s computer systems are not Y2K ready. (This potential problem is called the "Y2K problem" in the industry.)

"So what does this have to do with GPS," you say? Well the US Air Force thinks it is very significant. Their concern is whether or not the Global Positioning System will be able to operate properly through the millennial rollover. Consequently, the NAVSTAR GPS Joint Program Office (JPO), in Los Angeles, is currently implementing programs designed to prevent any interruption in GPS service. But they don't only have the year issue to worry about. There is a second potential rollover problem that many people are unaware of.

The system uses weeks to count time because the pseudo-random noise codes in the satellite signals repeat themselves in one-week cycles. This counter is called the end-of-week (EOW) number. When the system was launched in 1980 the count was start at 0000 UTC, January 6, 1980. Unfortunately only 8 bits in the coded message were allocated for the week counter which means it can only count up to 1024. So at 0000 UTC on August 22, 1999, the 1024th week since it started, the counter will rollover to 0. The user equipment will have to properly account for the previous 1024 weeks. Improper accounting for the EOW rollover could adversely affect a GPS receiver's

computations of position, velocity and time.

Based on the way the documented guidelines require a GPS receiver to be built, neither the Y2K nor the EOW rollover should cause problems for the GPS unit. If, however, receiver designs fail to accommodate the rollovers the units may experience problems tracking the satellites. When the system experiences its first EOW rollover, improperly manufactured receivers may interpret the date as 0000 UTD, January 6, 1980. Users with such units will automatically experience incorrect date and time information. Their receivers will also likely provide inaccurate position and velocity information because of the recorded almanac data that tells the receiver where a satellite is located in the sky at any given moment. In other words, although a receiver's position may not have changed at the EOW rollover, its position relative to the constellation will have changed. Solutions to user equipment problems will vary depending on specific receiver software and firmware designs.

The Y2K rollover will not affect receiver data directly because it does not use the two-digit year code to calculate time, position and velocity. If the receiver interfaces with a larger system that is not

Y2K compliant, however, that system could misinterpret the accurate data it obtains from the receiver.

(continued on page 4)

GPS - continued from page 3)

To handle these dual problems the GPS JPO has focused its activities on two efforts. The first involves analyzing computer operational systems in all GPS segments - space, ground and user equipment - to discover the extent of their system compliance with the Y2K rollover. Wherever this date ambiguity exists in the space and ground segments, GPS JPO will replace or upgrade the software to ensure that the computer system can differentiate between dates in the 20th and 21st centuries and handle them properly.

The second effort is the Y2K/EOW Validation Test Program. GPS JPO has been analyzing the entire System since early 1997. Each GPS segment has developed rollover compliance plans and contracted for the analysis, testing and upgrading of installations as necessary. The orbiting satellite constellation will be unaffected by either rollover. The manufacturers have ascertained that the current block II and IIA satellites comply with Y2K operational requirements and designers of the next generation are building compliance into their designs. The EOW rollover is not a factor in space since it affects only the user segment. A few Y2K problems have been found in the space ground support equipment. The Air Force began upgrading this in May of 1997.

The ground control segment is the brains of GPS, composed of the Master Control

Station at Falcon Air Force Base, Colorado, and satellite monitoring stations situated around the world. Apparently many of these systems were developed with the expectation that they would be phased out and replaced with Y2K-compliant versions long before the millennium. Because they have performed better than expected they are still in operation. The Air Force is now investigating all items that must be replaced or upgraded to be compliant. The cost of ensuring that the control segment is Y2K compliant is estimated to reach over \$7 million.

In the user segment the responsibility for Y2K and EOW compliant rests primarily with the designers and manufacturers of the receivers. The GPS JPO has a GPS Satellite Signal Simulator (SSS) that has been validated to test receiver operation before, during and after simulated rollovers. The US Department of Defense began testing its receivers for compliance in 1997. GPS JPO planned to make the test facilities available to civilian GPS manufacturers shortly thereafter, and likely has done so as of this writing. Any user equipment manufacturer or organization can arrange to have their receivers test.


Through the efforts of the GPS Joint Program Office and the vested interest of the US Air Force, we can feel assured that the system will continue to operate accurately beyond August 22 and December 31, 1999. What is unknown, however, is whether the many thousands of

GPS receivers out there will continue to be useable.

Before starting this article I sent e-mails off to several of the major manufacturers of aviation related GPS receivers, asking if their units were EOW and Y2K compliant. To date I have received replies from Garmin, Apollo and Trimble assuring me that their units will weather the storm. The fact that others have not replied does not mean their units won't bridge the gap, they may simply be ignoring me. Apollo did tell me that, although their Flybuddy model 820 will not have an EOW rollover problem, it will have to be upgraded prior to the year 2008. This will involve a firmware change (chip replacement), but they did not elaborate on the reason. Anyone owning a Flybuddy 820 should contact an Apollo dealer regarding this upgrade, if you expect to be still using it 10 years from now.

My advise to anyone buying a GPS receiver prior to January 1, 2000 is to verify with the dealer or manufacturer that it is both Y2K and EOW rollover ready. If you already own one you might want to contact the tech support department of the dealer or manufacturer and verify that your unit is ready, and if not, ask what you have to do to upgrade it. It wouldn't be too exciting to pay \$1500 for a GPS receiver only to have it die on August 22, 1999!

Happy navigating!



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AIR ALERT

From Nov 97 Sport Aviation mag.:

“This notice is for anyone considering using VW engines in their airplanes. It has been suggested that the Warp Drive propeller and the Volkswagon crank may be incompatible, causing cracking of the VW crank. This has been confirmed through the Warp Prop Company and Great Plains Aircraft Engines.”

Not Another Survey?

By Dan Mitchell

Kathy Lubitz, President of UPAC, sent me an e-mail late last year. In it she asked me a number of questions about Ultralight activity in the Calgary area. In her note, Kathy explained that the purpose of the questions was to gather support for UPAC's effort to promote passenger-carrying regulations for UL pilots. I prepared a brief questionnaire, using the questions Kathy had asked, and presented it to the members attending the January CUFC meeting. The weather that night wasn't the greatest (to say the least), and only twenty eight members were present. Each member at the meeting was given a copy of the questionnaire and asked to fill it out and return it before leaving that night.

A brief summary of the answers to these questions was presented to the members at the February meeting. The following is a compilation of the information gathered:

Of the 28 questionnaires completed, one stands out as being anomalous. Without getting into specifics, the individual who completed this form owns several more planes and flew almost 20 times the number of hours in the past year than the average club member. Needless to say,

this messed up our statistics big time. So, to get a better representation of the "average" responses to the survey, this one set of numbers was not included in the totals. However, this one anomalous questionnaire clearly demonstrates that we have one very experienced club member and valuable resource within our ranks.

Between them, the remaining 27 members own 18 registered UL aeroplanes (or airplanes if you prefer; and I do). That's 2 airplanes for every three members. Five additional registered UL airplanes are owned by members in the group surveyed, but are not flown.

One interesting question that Kathy asked referred to the number of unregistered UL airplanes that are being flown in the Calgary area. The fact that the question was even asked was more surprising to me than the answer we got.... none. Sounds about right to me.

I feel the answers to the next two questions are the most informative of the lot.

"How many hours did you fly in the past 12 months?" The 27 responses totaled 771 hours of flying time in the past year. That's an average of 28.5 hours per member. That's a very interesting statistic. If the average member flies less than 30 hours per year, and attends ten 3-hour club meetings each year, for 30 hours of socializing, maybe we need to change our name to the Calgary Ultralight Social Club.

Actually, when plotted on a graph, the distribution is fairly smooth, from 80 hours per year for one member to zero hours per year at the other end of the scale.

The next question was "What is your licence type?" Of the members surveyed, 18 have their UL Pilot Permit only. But 9 members, exactly half of the group surveyed, have a minimum of a Private Pilot Licence. It appears as if this is a very experienced group of pilots. The interesting point to be made here is that, of the 27 members surveyed, only 2 of the 15 members with the most flying hours in the past year have their Private Pilot Licence. Seven of the 12 members recording the lowest number of flying hours in the past 12 months have their Private Pilot Licence. An interesting correlation. Maybe not significant, but interesting.

The last four questions in the survey pertain to the number of accidents and incidents the members have had over the past 12 months, and their causes. Accidents were defined as situations "involving structural damage", and incidents were defined as "forced or precautionary landings with minimal or no structural damage". The members reported a total of 5 accidents, 1 due to engine failure and 4 due to pilot error. There was a total of 7 incidents, 3 due to engine failure, 1 mechanical, 1 soft-field landing and 2 due to pilot error. When asked for the cause, "bad landing" was given 3 times. I have taken the liberty of including those three answers under "pilot error".

Unfortunately UPAC's recommendation regarding passenger-carrying privileges went forward before the CUFC was able to provide Kathy Lubitz with the results of this survey. However, the club executive felt the general membership would be interested in the results.

I would like to thank the members who attended the January club meeting and took the time to fill out this survey.

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Connor's Question

by Stu Simpson

Every now and again life presents us with what I call "defining moments". I had one recently.

I've been trying to decide lately what my next airplane is going to be. I'd pretty much settled on Fisher Aero's Celebrity, a two-place wooden biplane. Then I did a bit more research and discovered I could do better, for my purposes, with a Fisher Flying Products Classic, a plane nearly

airplane with a matching reputation and manufacturer. I also pondered the high points of the Titan Tornado and even a few other designs.

But all that changed with a simple question from my little boy.

Connor and I were cuddled up on a comfy old chair in the living room watching a flying program on TV. The show displayed a number of different old biplanes. As soon as the first biplane popped up on the screen my son turned to me with all the wonder and anticipation in the world and asked, "Is that like the



Fisher Classic (photo from the 'net)

identical to the Celebrity. In my excitement and anticipation I promised Connor, who at 4 1/2 is my oldest son, that we were going to build ourselves a biplane and fly around the countryside together. I showed him pictures of the Classic and said, "That's just like the biplane we're going to make." Connor's eyes lit up with wonder and fascination as we talked excitedly about all the airborne adventures we'd have together.

Then my wife told me she's not so sure she wants our young boys snortin' around the countryside with the old man in a biplane. That's fair, though I didn't mention anything of it to Connor. But I started thinking about other planes and other options and had settled pretty strongly on the Rans S-9. The S-9 has many great attributes and seems to be an excellent

biplane we're going to make?"

All thoughts of S-9s, and Tornados, and any other airplanes disappeared from my plans forever, and smiling, I replied, "You bet it is. Just like it."

So the Classic is back to the top of my list again, and entrenched there quite a bit more firmly after Connor's question.

It seems our children are destined to grow among their parents' dreams. They'll grow stronger if we share our dreams with them.

An interesting quote:

"The sky is not man's element, so those who frolic through the clouds belong to an elite band of adventurers." - Wm. Neely in his book "Pilots, The Romance of the Air"

Classified

Chinook - 2-pl, 186hrs, Rotax 503, hangared, \$7990. Adrian Winship 640-7429 or 280-3631 (3/98)

Wanted - Ultralight aircraft, complete or requiring work. Allen 546-2588. (2/98)

Flight Jacket - MA1 USAF, navy blue, orange reverse, never used, size M, \$50 OBO. Ed Wawzonek 286-2664. (1/98)

Wanted - partners (2-3) for possible Ultralight building project (or re-build) or to buy a 2-place aircraft. Ed Wawzonek 286-2664. (1/98)

Warpdrive - 70" 3-blade right hand, SAE1, with spinner, ground adjustable, \$800. Ken Johnson 403-546-2586. (11/97)

Bushmaster - (Modified), new Rotax 582, C drive, electric start, new 77 x 53 Culver Prop w/urethane leading edge, complete restoration and modification in 1996 includes: round cowling, extended landing gear, tundra tires, Azusa brakes, new style pneumatic tail wheel, new fabric, Endura paint, new instruments, professionally upholstered seat, split doors, 15 gal fuel, electric boost pump, short take off, great climb, fast cruise. This aircraft performs and looks great to boot. Bob or Dan 403-452-4664. (11/97)

Beaver - RX550 2-place, Rotax 503, 30 hrs, upgraded wings, steerable nose wheel, Mono 2000 Amphib floats, will consider trade on an AULA, \$12,000. Don Leonzio 250-427-2046. (10/97)

Joke of the month

PILOT: Tower could you please give me a time check?

TOWER: Please identify yourself.

PILOT: What difference does it make. I only want a time check!

TOWER: It makes a BIG difference. If you are general aviation, it's 4:30. If you are military it's 16:30. If you are Lufthansa it's 22:30 Zulu,....and if you're an ultralight, it's Thursday.

Trouble Shooting Your Rotax

Engine Starts, Then Stops

This complaint is usually due to fuel starvation, but may also be caused by a faulty ignition system. Recommended trouble shooting procedures are:

1. Remove and inspect the fuel tank cap. The fuel tank is vented through a breather in the fuel tank so that the air can enter the tank as fuel is used. If the engine stops after running several minutes, a closed breather should be suspected. If it is

possible to allow the engine to run with the fuel cap removed and this permits the engine to run without stopping, then open or replace the cap. **WARNING!!!!** Be sure to observe safety precautions before attempting to run the engine without the fuel tank cap in place. If there is any danger of fuel being spilled on the engine or a spark entering the open tank, **DO NOT ATTEMPT TO RUN THE ENGINE WITHOUT THE FUEL TANK CAP IN PLACE!!** If in doubt, try a new cap.

2. If the closed breather in the fuel tank cap is eliminated, a partially clogged fuel filter or fuel line should be suspected. Remove and clean the fuel tank and line and (if so

equipped) clean the fuel shut-off valve.

3. After cleaning the fuel tank, line, filters, etc. and the problem still exists, a sticking or faulty carburetor inlet needle valve or float may be the culprit. Remove, disassemble and clean the carburetor.

4. If the fuel system is eliminated as the cause of trouble by performing the steps outline in 1, 2 and 3 above, then run a tester on the ignition coil. If a tester is not available, then check for spark immediately after the engine stops. Replace the coil, condenser and breaker points if no spark is noted.

Feature Plane of the Month

Having recently completed my "Renegade Spirit" project and enjoyed the past season flying this wonderful plane around our province, it is time once again to decide, "What Shall I Build Next?". And so the search begins. I found that within our circle of flyers the styles and types of aircraft are limited and not to my liking.

This left me to search the internet and magazines for something more suited to me.

In this search I have discovered hundreds of different types of aircraft and some engines that are quite popular in Europe and the USA all of which I had never heard of before.

I would like to share with the membership what I have found and if you have any requests on a specific aircraft I would be glad to pass on the available information to you.

The format is as you see below and the information is as supplied and should be confirmed prior to any commitment. Any follow-up will be up to the individual interested in that aircraft.

It should be noted that information on many aircraft is available on the internet and for those that are not connected feel free to call me and we'll spend some time searching for info.

POBER JUNIOR ACE

Wing Span: 34.00 ft
Wing Area: 168.0 sq ft
Length: 20.0 ft
Max Gross Wt: 1,250 lbs
Empty Wt: 750 lbs
Payload (full fuel) NA lbs
Fuel Capacity: 24.0 gal.(US)
Seats: 2
Cabin Width: N/A in.
Range: 250 sm
Takeoff Dist: 350 ft.
Landing Dist: 450 ft.
Vmax: 130 mph
Vcr: 80 mph
Vs1 (stall clean): 38 mph
Vso (Indg config): N/A mph
Climb Rate @msl: 500 fpm
Serv. Ceiling: 25,000 ft.
Std. Engine/HP: Continental /85 hp
Usable HP Range: 65 - 125
Const'n Materials: Tube, Wood, Fabric
Est. Bldg. Time: 1500 hrs.
Plans: \$125.00 Kit: Yes
Info Packet: \$8.00 Video: No

Side-by-side seating. Design has two doors and can be easily converted to an enclosed cabin version. This is an updated version of a 1930's design. The much wider fuselage, outrigger landing gear and 6:00 x 6:00 wheels and brakes give the airplane a new look. Shipping and handling charges: \$4.50 for plans, \$2.50 per info pack.

ACRO SPORT INC.
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Aircraft Spruce and Wicks Aircraft Supply Co. can supply material and parts kits for the plans only versions although

the latest information that I received indicated that kits are available.



Calgary Ultralight Flying Club Members

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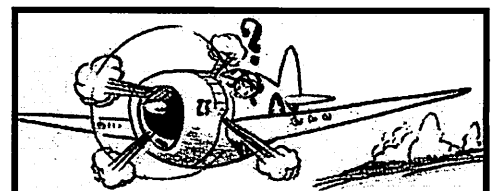
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 Munchrath, John 403-533-2140
 Myslawchuk, Ivan 403-533-3972
 Nesterenko, Nicholas
 Nugent, Scott 403-272-5890
 Orlick, Ted 403-279-7623
 Phillips, Pierce 403-289-8667
 Piepgrass, Bruce 403-255-6210
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 Pook, Jim 403-873-3953
 Rantala, Keijo 204-366-2095
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 Robertson, Bob 403-460-2075
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 Rogers, Don 403-242-6549
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 Simpson, Stu 403-255-6998
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 Sondergaard, Arlene 403-289-9662
 Stark, Wilfried 403-935-4248
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 Tarditi, Reno 403-276-4094
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 Watson, Bill 403-295-7885
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 Wegerich, Peter 403-948-5704
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 Wells, Dominique 403-282-2357
 Wells Norman 403-289-5264
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 Wiedemayer, Gene 403-256-9545
 Winters, Ralph 403-238-0406
 Winters, Wayne 403-936-5347
 Wright, Fred 403-256-5913
 Wright, Tracy 403-543-2575
 Yurchak, Mitch 403-288-4198



Barnstorming the Rockies

by Ray Abbruzzese

Editors' note: Ray is a member of The Midwest Ultralight Association #078 and is also District #7 USUA Representative. Ray, along with Robert Bennett, editor of Midwest Ultralight newsletter, have agreed to exchange flying adventures with us. Ray or Robert can be reached via internet through the Midwest Ultralight Association at www.novia.net/~rbennett/club.htm

I just returned from a great week of flying and I wanted to tell you a little about it. I joined up with Free Wings Of Denver, my old USUA club, for their annual flying vacation "Barnstorming The Rockies". This year, they decided to fly to South Dakota and spend the week flying around the Mt. Rushmore region. I had never been to that area so joining up with the Free Wings group and sharing some adventures sounded too good to pass up. I wasn't disappointed.

The Badlands region of South Dakota has some very pretty scenery that can also be very bad for ultralighters. There are grasslands and some meadows for emergencies but there are also many places where all you can see below are miles of forest, so flying there is breathtaking in it's beauty but breathtaking in it's pucker factor also.

The Free Wings group made the Custer County airport their "homebase" on this trip and Jerry, the airport manager, was very nice and accommodating to the group. He gave us advice on what to see and do and some things to avoid. He told us about the flight restrictions around Mt. Rushmore (more on that later) and the lack of flight restrictions around the Crazy Horse monument (a FANTASTIC work of art that is still in progress almost 50 years after it was started). You could see the gears turning as all of the pilots started thinking about how they would fly the area.

A flight around Mt. Rushmore was a given for EVERY pilot. You don't get that close and NOT fly around it. Jerry had told us (and the U.S. Forest Service confirmed)

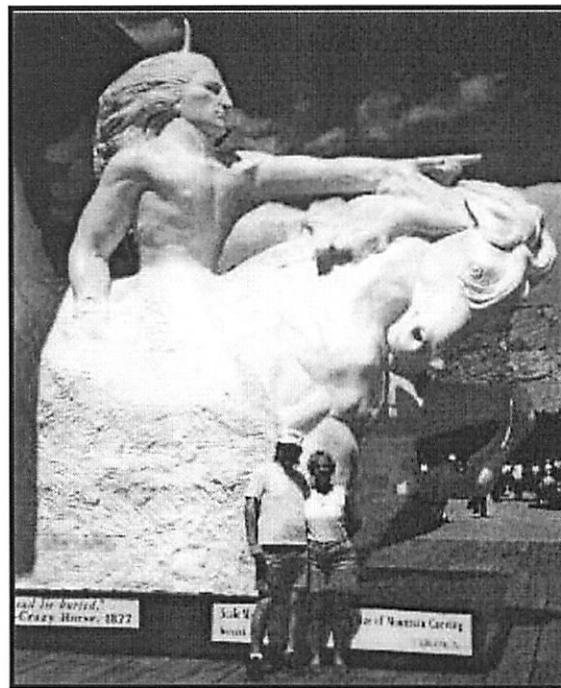


Ray's Quicksilver with the Free Wings of Denver

that flights were restricted to 2,000 ft. minimum AGL AND 2,000 ft. minimum in front of the sculptures. That meant flying to at least 8,400 ft, as the figures are at 6,400 ft asl and it also meant staying to the east of the parking lot below the sculptures. No problem, let's go. Every one of us found out the problem as we drew closer. Mt. Rushmore is surrounded by national forest, meaning trees, trees as far as you can see. No meadows, no grasslands, no lakes and only one road (the one to the monument) with trees on both sides. Definitely NOT UL friendly. Hope the Rotax doesn't stop now, there is NOWHERE to set down. Maybe 3,000 or 4,000 ft. would be better! No, even that much altitude probably

wouldn't get you to a good landing spot!

The view of the figures was also disappointing. The distance blurred the fine details and we found that the figures are really made to be looked UP at, not



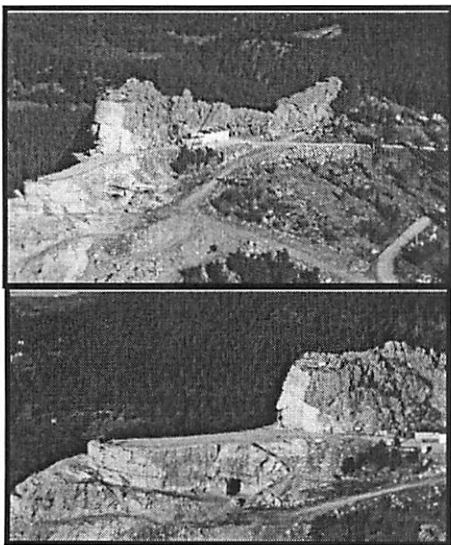
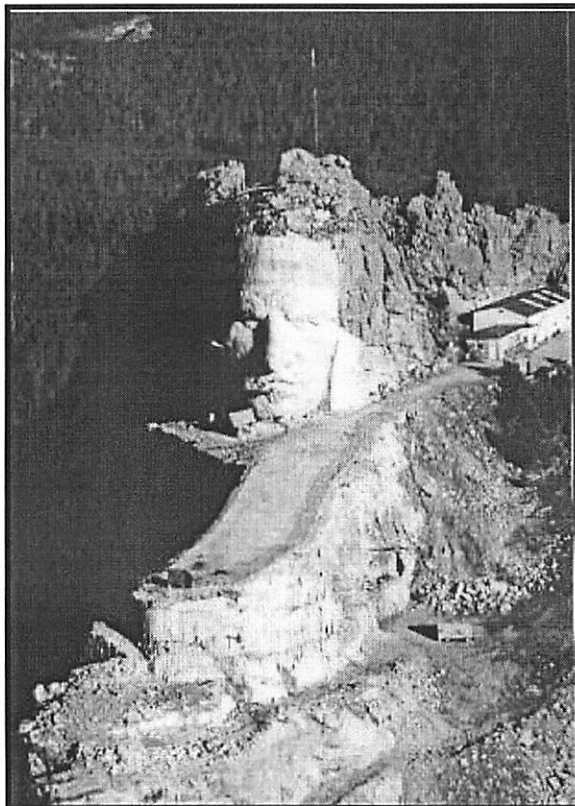
Presumably this is Roy in front of Crazy Horse statue

looked DOWN on from our height. It was kind of underwhelming. OK, been there, done that, now let's get the heck out of here before something happens. All of us made the trip once but I don't think anyone went a second time. Too much risk for too little reward. This was on the first day and I had forgotten my camera, so even though I told myself I would go back for pictures, I never did. I did start back one time later
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in the week but as the forest started to take over everything in sight, I turned around. Better safe than sorry and I know I made it once, anyway. No pictures is better than trying a deadstick in the forest !

But I do have a big complaint with the Forest Service. When we drove to the monument to see it "up close and personal", there was a sightseeing helicopter that was giving \$40 rides to see the sculptures. That pilot was flying right over the parking lot and the gift shop/viewing platforms at the base of the mountain. He/she was flying at approx. 250 - 300 ft. agl and only 400 - 500 ft. in front of the sculptures, basically at eye level with them. One of our group asked a ranger again about the flight restrictions, while the helicopter was hovering so the passengers could take pictures. The ranger again stated the 2,000/2,000 rules. When the copter was pointed out, the ranger said the pilot doesn't "normally" do that, only "very



Views of Crazy Horse

occasionally". When asked what would happen if a ul should "occasionally" pass so close, the ranger said the ul pilot would

be in VERY big trouble. Interesting. I was at the monument 4 times during the week, I saw the copter flying at least 15 flights during those visits and EVERY SINGLE flight of that copter came as close as the first one I saw. The use one ranger's "occasional" is another ul pilot's "every flight". Maybe there is an "understanding" between the rangers and the helicopter pilot but here in America I think it stinks. The rules should be for all or none at all. If the copter pilot can't make money staying back, so be it. Keeping private citizens back while allowing another to profit from the view is wrong, plain and simple.

But now, on to Crazy Horse. Crazy Horse was much closer to Custer County airport (6 miles, compared to the 35 miles to Mt. Rushmore) and you can see it as soon as you take off. The Crazy Horse monument is awesome! It is truly huge. All of the Mt. Rushmore figures would fit into just the head of the Crazy Horse monument. They have been working on Crazy Horse for almost 50 years and only just now is the face starting to emerge from the rock. There is a long story about the history and the future of this great monument, but this post is already too long to explain it all. And, with no flight restrictions, we had a

blast flying all around the gigantic statue. It was truly inspiring, flying close in, lower than it's chin, or passing right in front of it's eyes and over it's outstretched arm. I got plenty of pictures of this one but again, I missed the best picture. It was on the last day and I was flying over for one last pass when it happened. We had been told that there is blasting going on almost everyday but none of us had seen any blasting. Then, when I was approx. 1/3 to 1/2 mile away and closing, it happened. I saw a big puff of smoke and dust and rocks (probably boulders) tumbling down the right side of Crazy Horse's face. Truly awesome! I never heard the blast (probably due to the Rotax) but the sight was enough.

All too soon, the week was over. The Free Wingers headed back to Denver and I headed back to Lincoln with some wonderful memories and dreams of the next Barnstorm The Rockies. As they say, it just doesn't get any better than this. I do want to thank Dean Spencer for letting me borrow his Quicksilver GT 400, so that I could share in some adventures. Thanks for the memories, Dean !!!!! They will last a long time.

See you in the sky !



Jokes from the 'net

"Any More Complaints?" The controller working a busy pattern told the 727 on downwind to make a three-sixty (do a complete circle, usually done to provide spacing between aircraft). The pilot of the 727 complained, "Do you know it costs us two thousand dollars to make a three-sixty in this airplane?" Without missing a beat the controller replied, "Roger, give me four thousand dollars worth"

Which Exit Did You Say That Was? A DC-10 had an exceedingly long landing rollout after landing with his approach speed just a little too high... San Jose Tower: "American 751 Heavy, turn right at the end if able. If not able, take the Guadalupe exit off of Highway 101 back to the airport."