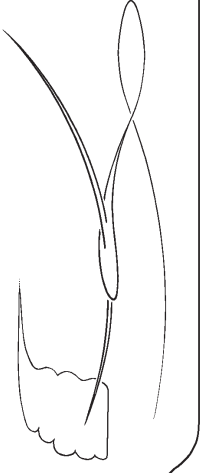


AScent

the journal of the Alberta Soaring Council



Notes from Phil

Phil Stade, ASC Executive Director

THE YEAR BEGAN with the administrative task of converting our bookkeeping from in-house *QuickBooks* to the online version. The change allowed our Treasurer, Gerald Ince and me to restructure the internal accounting so that it can be accessed by either of us. More importantly, reports can be generated without having to convert, assemble, or organize the data.

Our annual ASC Spring Safety Seminar was very well attended again this year. The topics covered included spring check flights, towpilot/glider pilot interactions, DIs, circuits, PowerFLARM use, personal limits, landing out, and more. Individual volunteers presented the group with information and the discussion that followed helped us all to be better prepared for the flying season.

Insurance requirements associated with the Cowley airfield lease renewal resulted in an eight-month search for a company that would both be interested in providing us with a policy and be able to offer it at a reasonable price. Thanks to the Western Financial Group and particularly Ryan Steinhoff in their Winnipeg office for the many hours spent to come up with a one-of-a-kind policy.

The Cowley field has new visibility from the air with the fabric structure erected by the Lethbridge Soaring Club to shelter their aircraft and tow vehicles. LSC has been launching their training and intro flights from Cowley. Their advertising efforts are bringing the airfield to the attention of a wider audience and growing their club at the same time. While the winch does restrict the launches to a small area, LSC club members have been getting good cross-country results on thermic days.

The major ASC assets are our towplane (PCK) and our Roman Design winch. The towplane continues to prove its worth as a back-up for clubs that experience towplane problems and for doing check flights and towpilot training. The Central Alberta Gliding Club normally uses it, and Edmonton Soaring was a major user this year when their towplanes were experiencing problems. If provincial funding decreases in the future, clubs may wish to financially back PCK operations so that the club towplane emergency coverage by this aircraft can be continued.

A very loud and boisterous cheer goes out to CAGC for hosting the Canadian Nationals. The organization and volunteer input was outstanding and astounding! The imperfect soaring weather may have diminished the flying conditions but the numerous social events and the general up-beat attitude of CAGC members carried the event. Well done! Finally, the OLC shows that many of the best 2015 flights in Canada occurred in Alberta. Again, well done pilots! May your preparations for the 2016 flying season begin now and lead to safe and enjoyable flights for everyone. □

Notes from Al

Al Hoar, SAC Alberta Zone Director

THE SAC BOARD had a two-day planning meeting in Ottawa. We moved the usual date up a couple of weeks to 23-24 October in order to have it coincide with the COPA fall board meeting and reception. It was a chance to get to know their board members and importantly, their new president. Overall, it was worth the effort to build relationships with not only COPA but also Transport Canada and NavCanada officials who attended the reception.

One of the things we discussed at the Board was the new *Safety Improvement Grant* program. We have allocated \$40,000/year for each of three years! The purpose is to put more financial resources into the clubs and to see investments in safety initiatives within the clubs. However, to date, out of a \$40,000 allocation for 2015, only \$5218 has been claimed. In Alberta, Cu Nim plans to purchase one FLARM, but the invoice has not arrived at SAC yet. This is not a problem since you can carry forward the allocation into next year and add it to next year's allocation. Keep the following in mind, it is VERY IMPORTANT: in order to qualify for the second part of this program and receive an allocation for 2016, each club is required to get the 2015 Safety Report to SAC by 1 December. For subsequent years' requirements, see the chart on the SAC web site. Look under Programs, then Safety Improvement Grant.

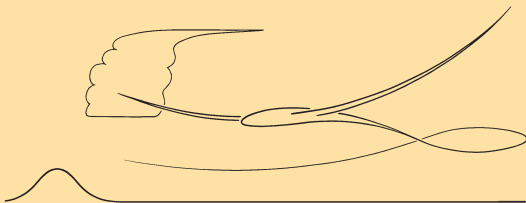
This year, October marked the 75th anniversary of SAC, and November marked the 75th anniversary of the Air Cadet gliding program as well. SAC plans to team up with the Air Cadets in 2016 to celebrate these milestones in a way that is mutually beneficial. We'll let you know soon what we come up with.

In 2016 SAC will hire a web editor to be responsible for content for our web site. *Contact me if you are interested in this job.* SAC spent funds on the technical side to get the new site built, and we have technical support on retainer to make sure that ongoing issues are quickly resolved. However, we need to greatly increase content and develop our social media strategy. This is necessary to realize the full potential of the web site.

This year we revamped our policy with respect to certain SAC supplies. We eliminated all charges associated with badge claims, from administration to the actual pins and certificates. We are in the process of reducing our inventory to bare essentials and will make more items free. For example, we charged for instructor kits and we will now be giving them away for free. Boxes of instructor manuals will be shipped to Calgary, probably a box for Lethbridge, and two boxes for each of the other clubs. A box contains 25 manuals and weighs about 70 pounds – does anyone know an inexpensive or free way to ship these to any Alberta location? Part of this effort to reduce supplies is that we need to reduce our footprint in the COPA office (40 boxes of manuals takes → 5

ASCent

the 2015 season



- 4 **Chocolates in July** – *Gerald Ince*
- 6 **Learning to fly** – *from The Outing magazine*
- 10 **Cowley** – *Phil Stade*
- 11 **Patrick's rocket ride** – *Pat Pelletier*
- 14 **Walter Mueller** – *Tammie Diesel*
- 15 **Young pilots go gliding**
– *Jason Acker, Chris Gough, Gary Hill*
- 18 **Club News**
- 23 **2015 pilot achievements**

**ASCent is the annual journal
of the Alberta Soaring Council**

The Alberta Soaring Council is an alliance
of Alberta soaring clubs supporting
the Soaring Association of Canada.

Executive Director, Phil Stade
Box 13, Black Diamond, T0L 0H0
(403) 813-6658, <asc@stade.ca>

www.soaring.ab.ca

Material may be freely used on the
condition that the author and ASCent
are given credit.

editing and layout
proof reading

Tony Burton
Ursula Wiese



Cover

*Under the Arch at 19,000 feet and over the Porkies
at the north end of the Cowley valley looking south.*

photo: Patrick Pelletier



Chocolates in July

Gerald Ince

THIS PAST JULY Guy Peasley and I had a memorable flight from Black Diamond in our Duo-Discus. It was far from a record flight in distance or duration; we flew only 149 kilometres in a little short of three hours, and our average speed of 51 km/h was certainly nothing to brag about. Still, each time I look at the photos of the flight, the memories of that day bring a smile to my face. When I think about that day, in which Guy and I were hoping for a much longer cross-country flight, my mind inevitably turns to a question – what exactly is it about our sport that captivates us and keeps us coming back season after season? Why do otherwise rational people spend a whole day at the field for a twelve minute flight? Why do glider pilots spend fourteen days at a gliding contest only to have four flights? Why commit ten or twenty hours of volunteer time on the ground for every hour in the air? Why do we continue when Mother Nature disappoints us so often?

In sport, and in life, there seems to be a mysterious interplay between hope and skill, luck and effort, fate and destiny that none of us truly understands as we are swept along in our daily lives. And there is something quite powerful about our sport that has hooked many of us and keeps us coming back. I haven't been able to sort it out, so in the end I will defer to Mrs. Gump's observation on chocolates.

On July 19, I did not hold out much hope for the day when I looked out the window first thing in the morning. There was a fairly dense haze in the air so I was in no rush to load up and

drive to the field. When Guy and I arrived at Cu Nim mid-morning, the haze had burned off and the sun was out. One of our members, Mark Janzen, had proposed to his girlfriend after an intro flight (she said yes!), and thermals were reported to be popping. Everyone was feeling good, so we decided to rig.

We launched to find narrow 3 to 4 knot thermals up to about 7000 feet, with cloudbase slightly higher than that. It was not hard to stay airborne, but given the low cloud base it was hard to go anywhere with either speed or confidence. We explored in the foothills to the west, where we found the thermals were even harder to find, and then worked our way east of the field just for a change of scenery. The sky was a jumble of cloud types at several different altitudes, and

the only thing you could be sure of was that the clouds couldn't be trusted – the good looking ones were lying!

After about two hours of wandering around in rather directionless flying we found ourselves over High River at 7000 feet getting ready to turn for home. Black Diamond was becoming heavily overcast, and the dark clouds indicated that rain would likely begin falling within the hour. The flight computer insisted the wind was from the east, but many of the clouds had a tilt that would suggest a southwest wind was blowing at upper altitudes. Our last climb had been on the southwest side of a cloud, and as we looked upwards, cloud streets were forming parallel to the mountains. Hmm, I won-

Momma always said life was like a box of chocolates. You never know what you're gonna get.

Forrest Gump



der – could there be wave this far from the mountains? We headed out into the sun between two cloud streets and explored for a bit.

We found zero sink over a relatively large area in the blue as we flew on the west side of a cloud street near the High River airport, and then stopped to circle in a sweet spot which allowed for a slow climb. We stuck with this for several minutes and soon we climbed up to cloudbase, then beside the clouds. Before long we had a smooth, steady two knots as we climbed over the tops. Once we got above the clouds we could see the wind was definitely from the southwest aloft, as the cloud streets had smooth lennie-like tops from the wind flowing up and over the cumulus clouds. A lovely street headed southeast for several miles. We flew along the leading edge of a lenticular in smooth, steady lift most of the way to Nanton before coming to the end of our cloud street at 9500 feet.

The skies were much more open to the south, and several nice looking cloud streets beckoned us to keep going. Wave, in July – roughly 50 kilometres east of the front range of the mountains! This was a totally unexpected turn of events. Could we climb even higher if we pushed west and south? Viewing the clouds from below, it was hard to see how the lift was organized.

Viewing the clouds from above, it was much easier to see what was going on in the air mass. Guy and I discussed our options, how to transition further west, and details such as which cloud was likely a rotor cloud and might mark the way to higher altitudes further south.

Ultimately, prudence, our previous dinner commitments, and the thought of derigging in the rain, made us decide to simply enjoy the beautiful views for a few minutes before heading for home. I pulled out my camera and took some pictures of the beautiful panorama below us. The green of the summer grasses, the yellow of the ripening canola fields, the deep blue of the sky and yes, the pure white of the clouds beneath us. The photo shown here was taken about 10 km west of Cayley looking more or less north. We are truly blessed to fly in such a spectacular part of the world.

Guy put the nose down and turned the Duo for home sometime around 4:30 in the afternoon. The cloud streets ahead merged into full overcast as we approached Black Diamond, and so we headed north as far as we could in a blue valley between two streets. I swear I had a tear in my eye as Guy opened full spoilers to burn off our hard-won altitude so we could get back below cloudbase for the last 18 kilometres home to Black Diamond! This turned out to be a good decision, as we had the glider washed and derigged a good thirty minutes before the downpour started.

Did we leave a long cross-country wave flight on the table? How far south could we have gone? Did the wave grow stronger closer to the mountains, and could it have carried us to much higher altitudes further south? Guy and I will never know what that day might have offered had we pushed things further. I do know that you often learn the most on the least promising days, and that in southern Alberta wave can show up at any time. Guy and I know that Mother Nature will offer up another different, but equally challenging and beautiful day in the future. And that is what keeps us coming back. □

Notes from AI

from p2

up a lot of room). The new president has concerns about what we pay COPA under our contract, so giving them back their space is one way to ease the tensions as I'm sure you appreciate.

Discussions with the SAC Sporting Committee and within the Board have identified a need to revamp our funding program for the Junior national "team". We spend a lot of money sending one often ill-prepared pilot to a World Junior contest every two years. At this early stage, the Board thinks that the funds would be better spent supporting juniors at Canadian and perhaps US contests and only send someone to the Worlds if they meet certain standards. We will let you know what we come up with, but for now Emmanuel Cadieux is once again representing Canada at the World Juniors being held in Australia in December. The total cost will be about \$17,000 with SAC paying a maximum of \$8300.

Overall, SAC continues to be in good financial shape even after we upped our budget considerably and reduced fees from \$120 to \$80 over the past few years. We budgeted to use some of the unrestricted funds this year to balance the budget. However, it always seems that we don't spend everything we intend to because of a

lack of uptake of available national programs by clubs. Not fully-used items are the Marketing program and (so far) the *Safety Improvement Grant* program. The Marketing program was doubled this year with clubs now eligible for 50% of their costs up to 20% of SAC membership fees paid in the year. Cu Nim is using this program to advertise and sell intro flights. Do other Alberta clubs use this 50% subsidy paid by the SAC Marketing program? One area that is fully used is the youth bursaries. Across Canada, the entire budget for youth bursaries was used; Cu Nim used two, ESC used six. Each youth bursary is \$499, which the club must match, and there are 33 bursaries available.

Overall, SAC membership has stabilized at just under 1000. It has been steady for the last three years so I think we may have stopped the bleeding and it is time to get the sport growing again. We're seeing growth in membership at a number of clubs across the country but this is being offset by drops in others. In Alberta, membership was 146 this year, down eight from 2014. Grande Prairie had six members in 2014 but none in 2015. Can we get to 160 Alberta SAC members next year – yes we can! A positive club culture is the key – keep existing members happy, run ground schools, recruit new instructors, attract youth ... invest in our future. □

LEARNING TO FLY

by AUGUSTUS POST

from "The OUTING Magazine", May 1911

FLYING IS A FASCINATING SPORT; it calls for the greatest exercise of self-control and requires, as essential elements for success, bravery, daring to a slight degree, courage, confidence in yourself, your men, and your machine, good judgement, clear sight, intuitive knowledge, positiveness of action, quickness of thought, all combined with a most delicate sense of feeling and acute powers of perception. Good health is both a result and a prerequisite of good flying, and your mind must be clear and free. When flying in ordinary calm weather and under perfect conditions, when your movements are automatic, the mind may wander to the beauties of the landscape below. Mr. Orville Wright once remarked that he nearly went to sleep while flying round and round over the same place for a long time.

In addition to these qualities, which apply primarily to what is done in the air, there is another side to flying that must by no means be overlooked. The aviator should have a good knowledge of mechanics and should understand something about materials and construction with metal and wood. It is not enough merely to order this or that part built; you should also know how it is to be done and what materials to use. You must have a sense of relative values and proportions and know the comparative weights and strengths of the various articles used.

The aeroplane with its light wires and thin framework is quite as strong and heavy, when compared with the air in which it moves, as a boat is when compared with the water in which it floats, which is eight hundred times denser than air, or the structure of an automobile when compared with the ground over which it runs. What looks to be a flimsy structure of wood and wire is as proportionately strong when compared with the medium in which it flies as is any vehicle for land or water. Bolts should be of just the right size to stand the strain and to perform the structural function for which they are used without unnecessary weight or size, and so it must be with all the other parts, whether of wire, metal, or wood.

It must be borne in mind, however, that the entire proportions of the design must be adjusted to an element eight hundred times less dense than water, and harmony in weight and strength must exist through all elements of the structure. It is easy to see the fundamental difference between an aerial motor and one of marine or automobile type. The same difference is evident in a well-built frame and chassis.

Another element enters into the construction of an aerial motor, which is the comparatively constant speed at

which it is required to run; there are no shocks or jars caused by changing gears or reversing the direction of the thrust, so much lighter construction can be used. The main structure of the aeroplane itself is lighter than the framework of water and land vehicles, in regard to weight and strength, as the aeroplane is comparatively free from great irregularities in its path such as waves on the water and rough roads on the land.

There is no cushion so soft as the air although special construction is required for maintaining equilibrium and absorbing the shock of landing, but it must be admitted that the strain of making spectacular dips and spiral circles is almost as severe as even a sailboat may have when you suddenly jibe its sail. The wings and braces creak and give under the increased pressure until it seems as if they must break. This is what has happened in several accidents, notably the one in which C.S. Rolls was killed in England last summer during an accurate landing competition. He miscalculated the distance and was forced to make an abrupt descent in order to land within the prescribed limits; one of the rudders failed and the machine fell to the ground.

There is still another side to flying that affects the aviator of the present time which is of no less importance than the possession of the necessary qualities and mechanical knowledge. I refer to the study of the air itself and the familiarity that must be gained with its actions, conditions, and effects.

The study of the subject of meteorology bears the same relation to flying that navigation and hydrography bear to sailing and geography and touring to automobiling. Lists are already prepared which give the prevailing weather conditions in different parts of this country and indicate the best times of the year for flying, the prevailing direction and velocity of the wind, and other matters of general information.

A great deal has been said in the newspapers about "holes in the air" but there is no such thing; holes do not exist in the atmosphere. It is a fact, however, that you encounter rising and falling currents about as often as those which blow in a horizontal plane. When the aeroplane enters one of these descending currents, the wings are blown down precipitously, on account of their large surface, giving the sensation of falling in a vacuum. The machine descends so rapidly that it is necessary to strap the aviator in his seat, as the machine would otherwise leave him sitting on nothing and he would have no solid purchase to enable him to operate his controls, for you do



not seem to start to fall, when this occurs, as quickly as the machine is blown down by the wind.

A thorough inspection of the field is the very first thing to be done before flying is attempted, and the aviator should take great pains to walk very carefully over every foot of the ground over which he intends to fly. He should observe every detail and examine every obstacle, making a clear mental map of its location. The actions of the air currents should be studied and every minute thing that could in any possible way affect the flying of the machine should be most accurately observed and distinctly remembered. He should not confine his investigations merely to the field over which the flights are intended to be made, but all the open country in the vicinity should be examined also, and the direction and extent of their available smooth ground for landing should be thoroughly mapped in the aviator's mind. Once when Mr. Ely was flying at Poughkeepsie, NY, a rudder wire broke on the machine so that he could not change the direction of his aeroplane and he was forced to fly in a straight line until an open field appeared which offered him a safe landing place.

Besides the chance of an accident, the wind may blow the machine far away from its starting place and it may not be possible to get back; Ralph Johnstone was blown in this way nearly sixty miles away from Belmont Park during a severe gale.

Beware Even the Gentle Breeze

The novice must attempt practice flights only when the conditions are perfect and the air is dead calm (and this means *dead calm* when not a breath of air is stirring the leaves of the trees). There is plenty to do for the aviator who is making his first flights to manage the machine itself without being required to look out for gusts of wind and unknown and unforeseen dangers. A beginner should no more think of attempting a flight in high wind than should one learning to drive an automobile take his first lesson on Fifth Avenue during the crowded part of the day. The quickness of thought required to make the decisions necessary for passing through the maze of traffic safely leaves no time, energy, nor attention for thinking which lever must be used, and you must perform the mechanical movements which are necessary in such a place as you use your feet in walking – with absolute unconsciousness, and without the least demand upon the attention.

At a later stage in the course of instruction, when the aviator has gained confidence and after all the movements necessary to operate the machine have become purely automatic, so as not to require the least thought on his part, the aviator's attention may then be devoted to overcoming the problems presented by the wind. Gusts are felt without warning; swirls of air are encountered when passing over or near buildings, and puffs come without regularity and without warning.

Gusts of wind are only evident when they are perceived through the delicate and highly acute sense of feeling of

the aviator, who must immediately adjust his balancing devices and rudders to meet the situation and to counteract the effect. When you become exceedingly skillful you can tell just how much to do and how much not to do, allowing the machine to follow its own inclination to a slight degree, to go with the undulations of the air or be turned out of its path by the air currents, allowing it to drift back again slowly of its own accord, when it will resume its proper direction with a gentle and easy return and with much more saving of friction than an excessive or impulsive movement of the controls would occasion.

This ability to let the air have its way, like letting a horse "have its head," is equally important and perhaps more apparent in the handling of a balloon, for the aeronaut soon gets the touch or the "feel of the air" and quickly learns just how much ballast to use to check the balloon when it starts down. The same "feel of the air" can be learned in a flying machine.

A usual fault with all beginners in anything, and sometimes with old hands when they lose their flexibility, is that they are inclined to be too abrupt and to steer too close to a line. We all remember our first experience on a bicycle when we wobbled all over the road and turned the front wheel much too great a distance in the opposite direction in order to correct a slight tendency to turn in the other. This overcorrection itself requires to be righted and is apt to cause complications in other directions, especially if there are many obstacles.

There seems to be also a lesson to be drawn from the accident to Archie Hoxsey, who was killed at Los Angeles while flying in a high wind and attempting to surpass his own record for altitude after three days of marvelously successful flights, during which he exceeded the world's altitude record and set it far above all others. There can be no conception of the terrific strain that he was under as a result of his previous success; this feeling, amounting almost to overconfidence, that nerved him up may have been responsible for the momentary loss of control or attack of air sickness, caused by his aeroplane coming down at too great an angle of descent and at such a frightful speed that the wind was seen to turn it completely over in the air, after which it dashed to the ground before it could be righted, instantly killing the daring pilot.

Not Always the Machine's Fault

Whether it was the prolonged strain or the violence of the wind that caused this accident it is hard to tell, but it seems to show that the machine itself is not always to blame. A mistake in judgement, air sickness, which may be caused by too quick a descent, or momentary lack of attention at a critical moment, are equally to be guarded against. Cecil Grace was seen to take a wrong direction and head for the North Sea instead of the shore of England, and finally become engulfed in a dense fog while returning after a successful flight over the English Channel. The mere thought of being lost in a fog is bad enough, but to

be compelled by necessity to continue on flying until overtaken by exhaustion is enough to send the cold shudders down one's back.

It must be realized that the aviator practically steers in three directions at once, up and down and to right or left, and he must also maintain his balance. All these functions must be kept in his mind at the same time; and this is only a small part of the problem presented to him in flight. It is like steering an automobile upon a moving sidewalk, or an even more realistic simile would be steering an automobile upon a great moving escalator mounted upon a moving sidewalk; thus, motion in three planes may be visualized, for the path of the aeroplane would be the resultant of the movements of all three machines.

Imagine that you are endeavoring to avoid an obstacle upon which your mind is fixed, as let us say, a tree in the center of a large field; some subtle force seems to be always drawing us toward the very obstacle from which we desire to escape; it seems to fascinate us and we are almost sure to collide with it as long as it is a dominant idea in our mind. But when we forget about it, or pay no special attention to the thought, its terror vanishes. When Captain Baldwin was making practice flights at Hammondsport, NY, there was a lone tree in the flying field which had plenty of clear space all around it, but he succeeded in hitting it, for no other apparent reason than that he was trying so hard to avoid it.

The aviator is confronted with another curious feature of the aeroplane which can hardly exist in the mind of a person who has not had the actual experience of these conditions in the air. It is almost impossible for a person on the ground to conceive of the results which follow the tipping or the tilting of the aeroplane while banking on a curve, or making a "spiral dip", such as was made so famous by Johnstone and Hoxsey, who turned their machines up sideways until they were flying at an angle of nearly ninety degrees to the horizontal, almost a right angle to the normal position of the aeroplane in flight.

Let us see what happens to the rudders and control planes when they are revolved about a fore-and-aft axis until they are at right angles to their normal position. The horizontal front control ordinarily used for ascending and descending is completely turned from the horizontal plane to the vertical and becomes a rudder which steers the aeroplane to the right or to the left; the vertical rudder in the rear, on the other hand, assumes a horizontal position and by its operation tends to make the machine ascend or descend like a rear control.

Hence, in making a spiral dip, the steering must be accomplished by means of the elevating plane, and as you draw the control lever toward you the machine comes around like a bicycle on a "saucer track", while the steering rudders must be carefully adjusted to control the descent. When the aeroplane is flying at an angle of forty-five degrees to the horizontal, the front control and the rudder should, theoretically, be equally able to perform

the functions of the other. Careful adjustment must be made between the movements which control these functions, and after long practice they become instinctive. It is in just such fine points as these that the personal equation and the characteristics of the individual aviator reveal themselves most clearly.

The art of preserving the lateral equilibrium or balance must be studied carefully, for the tendency of the aeroplane to slip sideways or skid through the air on the turn causes it to lose the support of the air which is gained by its forward motion and makes it necessary to bank the planes on the turns; if they bank too much, on the other hand, the whole machine will slip down through the air on the inside of the circle and may easily come to grief by striking one wing on the ground. Fortunately, the machine tends to take its natural inclination, for in turning the outside wing proceeds faster than the other, giving it a slightly greater lifting effect and canting the machine on that side, as has already been mentioned.

The aviator must be very delicate in his movements, keenly sensitive to the least suggestion of what may be required, and quick and sure to act, but not in an arbitrary manner, for the "feel of the air" is one of the most fascinating and subtly artistic touches that can be learned. Like confidence in swimming or riding a bicycle, once secured it never leaves you.

There is often discussion among aviators as to whether you should "bank" before using the rudder in turning, or use the rudder to turn and have the banking take place automatically, because of the fact that one wing travels faster than the other, giving it greater lifting power. Mr. Curtiss has often criticized his pupils for not banking enough when making a turn, for it is extremely necessary to get just the right angle to prevent a serious accident.

In the construction of a flying machine the movements that the aviator must make with the controlling levers should be as instinctive as possible. There should also be some natural relation between the movements of these levers and the effect which it is desired to produce.

The Bleriot monoplane has a standard with a small hand wheel on its top, placed just between the knees of the aviator (very much like the steering post of an automobile, but much smaller). This hand wheel is pulled backward toward the operator if you wish to rise, and this seems quite a natural movement to make. If it is desired to descend, this hand wheel is pushed forward, also a perfectly natural movement to make with the body. If the machine tips up on the right side, the standard is moved to the right to counteract it. If it tips to the left, it is moved to the left.

Combined movements, or movements diagonal to these cardinal movements, can also be made when it is necessary to balance and ascend or descend at the same time, for the standard is mounted on a universal joint, so that it can be readily moved in any direction. Steering is done by the feet, which rest on a bar pivoted in the center and con-



nected by wires to the rudder in the rear, like the steering arrangement in a single-oared shell.

The beautiful Antoinette monoplane is controlled in quite a different manner, however, from any of the other flying machines, although the principle, of course, is the same. This aeroplane has two hand wheels, one placed on each side of the aviator, which rotate in the fore and aft plane. The right-hand wheel controls elevating and descending, and the left-hand wheel warps the wings. Steering is done by the feet, as is the universal custom in all of the foreign machines.

At this point it is interesting to consider whether it is a good practice to confide to the feet such an important function as steering, and also whether the shoulders and body of the operator are sensitive and quick enough to accomplish the movements necessary in delicate balancing, or whether the hands of the pilot should not be used to perform these delicate functions. The most popular types of French machines are all steered by the feet of the aviator and balanced by the hands, but the American type of machine is steered in almost every instance by the hand of the aviator and the balance is very generally accomplished by the movements of his shoulders or body.

Where American Machines Are Different

Why American aeroplanes differ radically from the foreign machines in this point is hard to tell. The Curtiss, a typically American machine, and one copied more than any other by other builders, uses the shoulder yoke and the instinctive movements of the body for preserving the lateral stability or to balance the machine. This lateral stability has always been the "bugbear" of flying machine inventors, but Mr. Curtiss says it is as easy to become accustomed to guarding against falling over sideways as it is to prevent falling over forward or backward; you unconsciously do it when walking or riding a bicycle, and it does not cause any great trouble there. Why can you not learn the same thing in the operation of an aeroplane?

The Wright biplane is controlled by two levers, one at the left hand of the aviator is moved forward or backward to operate the rear horizontal control, for in their new type machine they have moved the original front control to the rear, where it acts in the same manner as the rear horizontal control of a monoplane for elevating and descending. At the left hand of the operator there is another lever which is practically a double lever, as its main portion is moved forward and backward to warp the wings, while the handle of this lever may be moved transversely to operate the vertical rudder planes in the rear.

A delicate combination of movements, both in the fore and aft and in the transverse planes, must be made by both the arm and the wrist to operate this lever, for in this machine, when the wings are warped, the theoretically increased resistance caused by the greater curvature given to the surface on one side over the theoretically decreased resistance on the other wing caused by flattening it out,

may give a turning tendency to the whole machine which can be offset by turning the rear vertical surfaces in order to interpose an equal amount of resistance, which tends to keep the aeroplane on a straight course through the air.

On a two-passenger machine an extra seat is placed on the right of the aviator's seat, and a duplicate elevating and descending lever connected to the main lever is placed at the extreme right of the passenger seat. This enables each to operate the machine, except that the operations of the right and left hands are reversed.

No doubt two aviators will ascend and take "tricks at the wheel", as the pilot and aide in a long balloon journey are accustomed to do, eating and sleeping by turns. One of the foreign aviators has already made arrangements so that he can eat in his aeroplane, and on one occasion he has taken two meals while in the air. Mr. Henry Farman built a cabin on his machine to protect himself from the severity of the weather during his great flight for the Michelin Trophy, when he made a new world's record by flying continuously for more than eight hours.

The Curtiss biplane is possibly the most natural of all the types to operate, for the movements of its controls are perfectly instinctive and so natural that the aviator, in a time of excitement, when he might possibly forget for a moment, is inclined to do the right thing and to operate the control levers in the correct way. A vertical hand wheel is placed directly in front of you as you sit on the seat of the machine. This hand wheel is grasped by both hands and is pulled back to cause the aeroplane to ascend and pushed forward if you wish to descend. If you turn the hand wheel around on its axis to the right, it turns the machine to the right. Turning it to the left turns the machine to the left, under normal conditions.

A "shoulder yoke", which is simply a swaying back with high arms, is hinged to the seat in such a manner that it can be moved by the aviator's shoulders toward the right or the left side. Wires extend from this shoulder yoke to the balancing planes hinged on each side of the aeroplane. When the machine tips up on the right side, the most natural movement for the aviator to make is to lean toward the high side, and this is the movement that must be made to bring the machine back to an even keel. The movement is reversed to counteract a tilt in the other direction; a pedal operated by the right foot stops the motor, and one operated by the left foot opens the throttle, accelerating its speed.

After examining all the various machines, and having chosen the one that you think is the best, go to a good aviation school or follow a good aviator and stick to him, remembering that "the only way to fly is to fly".

The most important moment in the history of its development will come when a human life is saved by the aeroplane. It will then be hailed as the greatest blessing to mankind, and just as the wireless was taken to our hearts, so will the aeroplane and the aeronaut be honored and rewarded. □



Phil Stade

Phil Stade

THERE ARE TWO KINDS of glider pilot... those that have been to a Cowley Camp and those that haven't. Despite the obvious nature of that contention, there is a depth to it that may not be evident at first.

Most of our clubs are located in somewhat benign regions of the country. Cowley is not. Most pilots fly when conditions are 'inviting'. Pilots at Cowley often choose to fly when conditions are challenging. Instruction flights at our clubs focus on one or two aspects of flight. Cowley instruction flights may offer lessons in every area of physically controlling the aircraft and mentally responding to the situation as it develops. Landing out on local flights at our clubs generally doesn't happen. At Cowley you can find yourself on the ground in minutes after a 4000 foot tow. Jeff Helps did for example – see the photo on the opposite page. As one student said, "I learned more in one flight than in all of my other flights combined."

This year the Summer camp was strongly supported by pilots from the Winnipeg Gliding Club and some returned with new attendees for the Fall camp. I'm sure there are a number of factors that brought this about but Patrick Pelletier's videos (peanut425etac), stories, and instruction must have been a major motivator for Winnipeg pilots. Over the past four years Patrick has been accumulating experience and enthusiasm and now is often one of the first to leave the field on cross-country attempts and the last to arrive back at the end of a long day. Wave, ridge and thermal conditions can be part of a single flight both summer or fall.

Both of our camps took a 25% hit in attendance this year and I suspect the major reason was the incredible number of volunteer hours put into the Canadian Nationals hosted by the Central Alberta Gliding Club members and the participating pilots. The 30 summer attendees flew 167 times with most tows being to 2000 feet, while the 29 pilots in the Fall camp flew only 105 times and the tows averaged 3500. As you might

guess from those stats, the summer thermals were mostly gone by October and getting into wave was the primary goal at Fall Cowley.

Thanks to Simon Youens, Dale Brown, Bob Hagen, Neil Siemens, Jos Jonkers, Ab Fotheringham, Ted Sorensen, Jean Claude, Mike Crowe, Patrick Pelletier, Soren Christiansen, Dave Morgan and Lyn Michaud for towing during our camps. In total, our capable towpilots safely hauled us to the equivalent of a low earth orbit at 233 km!

For all of its challenge Cowley often presents a gentleness that delights students, pilots and intro flight participants. Jordan Lewis was ready to fly early on 2 August and conditions were perfect for his first single-seat flight. His smile and excitement reminded many of us of the joy we took in moving from the 'old' two-seat trainer to the more nimble 15m aircraft. Later at the Fall camp and still a student, he achieved a climb of over 3000 metres which should qualify for his Gold climb. A couple of days later we climbed to over 15,000 feet during his licence check flight which gave him lots of time to demonstrate numerous variations on how one can enter a spin... and he did pass!

There's no doubt that I love to fly on the last day of camp – clean up day. The Fall camp came to a close with some of the most challenging winds of the week but seven glider pilots launched and their five flights all reached the maximum permitted altitude of 28,000 feet for Wilf Plester/Colin Plester, Phil Stade/Denis Nolan and Pavan Kumar, and 18,000 feet for Darren Clark/Peter Cromer and Phil Stade/Alex Fehr. What a day and we also got the clean up done!

It's hard to know what to wish for as we look ahead to the camps next year. Perfect conditions? Perhaps not, at Cowley it's often the surprises that are the most memorable. See you at Cowley next year! □

Patrick's Rocket Ride

I'VE BEEN GOING TO COWLEY for a few years now and every time I go, there is something new for me to learn or experience. This year, I made the decision and commitment to always go flying with an objective in mind and to not leave the ground with "I'll just go soaring" on my mind. This decision has worked well for me and I plan on keeping this mindset for future flights. During the Summer camp, the conditions were great on most days, my goal for the duration of the camp was to work myself up to a 500 km task. I didn't achieve the goal, but I learned a lot along the way.

The Fall camp can only be described with one word: unforgettable! The wave was present most days, and when it was, it was strong and reliable. All my flights have taken me above 20,000 feet (FL200), where I spent the majority of my time. Every day was different with regards to wave entry, wind conditions, sky conditions, and wave strength.

My first flight objective was to achieve FL280, wave entry was simple, I got towed into the wave and released, wave strength was showing a good solid 8 knots which took me to FL220, but no higher. Oh well, try again tomorrow. The second flight took me higher. Same objective – each FL280. I added a secondary objective to explore and find wave in places where I haven't been. Wave entry was via a climb under the rotor until I reached cloudbase and then a push upwind to penetrate into the wave. The ride in the rotor was memorable, but with a bit of work I managed to connect. Another reliable wave climb to FL210, which was all on offer. I decided to push towards the Frank Slide where I could see a faint lenticular above my

height. Carefully riding the weak wave and maintaining FL210, I managed to get close the Frank Slide where I had to cash in some of my altitude to make it to the front of the lenticular. It's a bit unnerving when you are only 3000 feet above Victor 300 and you are trying to reach a point that's pretty much on the airway centreline, so I'm taking a bit of a gamble. With a bit of mental math, I established my point of no return just in case I need to turn around to avoid an airspace violation. My gamble worked out perfectly and I reached that small bit of wave over the slide area. The wave was strong, somewhere around 13 knots, and the lift took me quickly to FL250.

Not too long after that, the lenticular decided to stop playing nice and in the blink of an eye it suddenly expanded around me, leaving me in a near whiteout. I could only see the ground 45 degrees below the horizon, and even that was disappearing fast! Gotta get down now! Trimmed the glider and opened spoilers, and a minute and a half later I was back below the lenticular. There was an off-axis lenticular forming over the south end of the Livingstone Range, its orientation was north-east to southwest and I was curious to find out what it had to offer. I reached it and hit some reliable 4 knot wave and climbed a few thousand feet. I think this wavy lift was caused by windshear aloft, which probably explains the unusual lenticular orientation.

My third flight was an exercise in human endurance, 6:17 hours, most of it spent above FL200 except for the first two hours trying to make my way above 14,000 feet. Wave entry was unusual, but I had seen and experienced a similar situa-



Phil Seade

Here's Jeff Helps. He is a licensed power pilot and low time glider pilot from Winnipeg. I took him up for a flight in the K-21 and got towed to nearly 4000 feet south of Centre Peak and above the North Burmis Road. It was very turbulent and although we thought we were in lift at release we were soon in strong sink and too low to head east. I tried to climb in the turbulence – we could get 500 or 600 feet in a half a turn and lose that and more on the other

half. While I tried to climb away I talked Jeff through the landout field selection process. He identified the wind direction by observing the waves on a pond to our north. Once we had selected the landing field, our position allowed us a full circuit with a final from the southeast. The landout turned out to be an excellent exercise in field selection and off-field landing circuit planning. The field was smoother than the runway we launched from.

tion once before. The Livingstones had a cap cloud covering the peaks, and based on that information, I asked to be towed as close to the mountains as the towpilot would dare. That got me close, but not close enough. I released and made my way to the mountains to the exact spot where I picked up the wave a few years back. Once there, I proceeded with heading directly towards the “waterfall” of clouds to a point where I was only a few seconds away from entering the falling clouds. Suddenly, just like my last time, I started climbing at around 16 knots in what I can only call a hydraulic jump caused by the falling air. I spent about two hours trying to climb above 14,000 feet.

I was north of the gap when I started hearing gliders reporting good climbs near Centre Peak. Off I go! Once there, I had the chance to fly some close formation with the DG-1000 for a short photo op and then proceeded to climb to the Flight Levels along with Pavan in EH. We slowly made our way up to FL250 where the wave settled. I got bored and went exploring again, back to Frank Slide, nothing there. West towards BC then; I caught some wave near the Continental Divide; however, I had to remain below 18,000 feet and away from V300 so go south. South has some wave, but it tapered off about

halfway to the US border. I was making my way north when I heard a call that there was lift near Lundbreck. Crossing under V300 this time I managed to find wave on the north side and climbed high enough to attempt Lundbreck while staying above V300. A well-defined lenticular had formed over Lundbreck which made the wave climb easy. I took everything the wave had to offer up to FL260, looked north and saw a beautiful secondary lenticular with a very steep upwind face. I cashed in all the height I just gained and raced over. It paid off! My final climb got me to FL280. The most memorable part of this climb was the cold. Getting above FL260, I started feeling chilled to the bone. Uncontrollable shivering set in and I could not wait to get back down once I reached my goal. The descent felt like an eternity, I shivered for another 45 minutes and was not having a good time. The remainder of the flight was uneventful.

My fourth flight – the rocket ride! It’s not that I’m saving the best for last, it just worked out that way. My new goal was to see how much distance I could get and I wanted to maximize my OLC points. It didn’t quite work out as planned but I still managed to fly over 300 km. First things first: surface winds were about 30 knots, increasing to 55 knots at about 1000

The sun set and the Arch was a deep purple, then it became incandescent down in Montana. Just a few minutes later on – it



LIGHT

feet agl. The airmass analysis showed an unusual vertical wind profile: 55 knot winds all the way up to 19,000 feet and then suddenly down 5 knots. It turns out my computer wasn't out to lunch and the winds were in fact just as predicted. After take-off, the tow showed us plodding along at 25 km/h ground speed so I'm not going to reach the Livingstone Range following this Scout. I released and proceeded to look for the secondary wave. It was initially difficult to get climbing, but I managed it.

Time to accumulate some miles as far north as the wave will allow, then as far south as I dared. Going as far as I dare usually turns out to be a mistake. I ended up pretty far south considering the wind conditions and when I turned back towards Cowley, I realized that with my ground speed of 25 km/h, it's going to take a while before I see home again. No worries, I have final glide to Pincher Creek. I cashed-in everything I had to make Cowley. By the time I reached it, I only had about 1000 feet extra height to look for lift. I headed to a point where I knew the secondary recently worked for me.

That's where it hit, BOOM! a sudden vertical acceleration. I called it on the radio: "13 knot secondary wave directly east

of Centre Peak". I had a steady 13 knots all the way up to 13,500 when I felt a second acceleration, and it felt like I was back in my CT-114 Tutor. I was climbing rapidly through the mid-teens – even the altimeter was starting to hesitate due to hysteresis, a familiar sight with fast climbing jets. The lift was strong and steady and the averager increased to 25.5 knots (a short video of that climb can be found at: <https://www.youtube.com/watch?v=YcFradmQV94>). Later, the flight analysis showed the max sustained climb rate was 25.9 knots.

I rocketed up to 19,000 feet where the ride suddenly ended. The light winds above FL190 caused the wave and the climb to abruptly stop and it was immediately replaced by severe turbulence. ZA was barely controllable, but for over an hour I continued racking up the miles and getting thrown around by nature. The turbulence resulted in easily maintaining altitude above FL190 as long as you didn't mind getting your coffee spilled.

The 2015 Fall camp was my best Cowley experience so far, I learned a lot, I achieved most of the goals I had set and I got a high-speed jet-like climb to top it all off! Did I mention how beautiful the sunset was on that last flight?

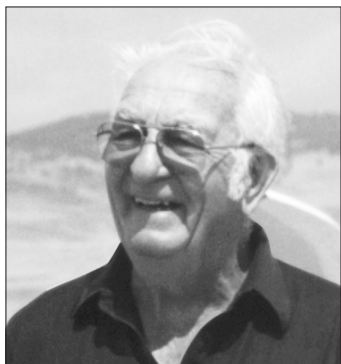
in the greatest fireball Cowley pilots have ever seen. *Photo: Phil Stade*

TS UP



Walter Mueller

29 October 1920 – 27 August 2015



Walter was born in Fahrnau, Germany. At the age of 17, he joined a youth organization much like the Air Cadets and literally bungee-launched into his passion for soaring at Gersbach on the hills of the Black Forest. Although every flight was a solo those days, Walter's official solo was "quite a few seconds, skimming almost a metre above the ground, made in a Zögling 33 primary glider". Two years later in 1939, Walter joined the Luftwaffe with the certainty of becoming a Luftwaffe pilot and then a planned Lufthansa pilot. From 1939-1945 Walter trained, instructed, and flew missions during the war. He dreamed of furthering his skills towards an engineering degree and becoming a professional pilot.

He married his wife Ursula in 1942. Because of the harsh existence for the family and the hope to do better following the war, they looked to Canada as a potential new homeland. In August of 1951 Walter joined 150 German emigrants, boarded a ship to Halifax, then by train to his new home near Winnipeg. His young family joined him in March 1952. The family embarked on homesteading activities, Walter worked at a coal mine, a machine shop, and worked at Canfor until his retirement. Following Ursula's passing, he married Grace Diesel with her large and somewhat exuberant family.

He never lost his early passion for flight and for soaring and was determined to have his head in the clouds once more. Walter's first flights in Alberta were during a refresher course offered in Calgary in 1959, made in a Cessna 159, then flew a Grumman Yankee. He purchased the Grumman in 1988 and flew it for the next ten years around Alberta. Anyone willing to share in the joy of flight was a welcome guest in the passenger's seat. Finally, in 1994, aged 70, Walter got back to his first love of flying gliders.

On 29 Oct 2010, at the age of 90, he carried out his wild idea of a birthday flight over Grande Prairie – 12 minutes and 36 seconds of freedom and accomplishment. 19 August 2011

marked 75 years of flying, with the last flight in his much-loved Open Cirrus before selling it. 2 June 2012 Walter took to the skies in his last flight over Beaverlodge in a Puchacz during a locally hosted fly-in weekend, with his good friend Bob Hagen at the helm.

His words, written in 2011, "I am fully aware that my flying days will be over in the near future and when that happens I shall not be sad that it is over, but happy that it happened..."

[edited from a biography by Tammie Diesel]

Soaring Achievements

- 1937 A Badge Zögling, Gersbach, Germany
- 1938 B Badge Zögling, Gersbach, Germany
- 1939 C Badge Grunau Baby, Konstanz, Germany
- 1983 Silver • 1981 distance & altitude, 1-23 Grande Prairie to Valleyview, • 1983 7 hours, K6E
- 2006 Gold #318 • 2006 Cowley altitude 3770 m
• 1983 Cowley - Maple Creek, 330 km, K6E

1984 SAC Significant Flight Certificate

Walter Mueller, Grande Prairie Soaring Society, for a 254 km attempt on a 350 km goal flight in a Ka6, over particularly forbidding territory in northern Alberta.

SAC Award of Appreciation

2012 In recognition of his contribution to soaring in Canada.

Walter wrote: "Now I am trying to figure out what contribution I did to soaring in Canada – I never won a contest, I didn't even complete my Diamond badge, but I did show what a positive attitude and enthusiasm to our sport can accomplish even at an age where others prefer a rocking chair; my rocking chair was the sling seat of my Cirrus, which I occupied for over 500 hours beginning at the age of eighty.

I think what the Board of Directors was looking at was not so much my flying statistics but rather the human side of this sport, where I showed by example, enthusiasm, positive attitude, and perseverance to stay with gliding even when it looked hopeless for me (as it was sometimes with our small club), and just simply be "a good sport" and help out wherever help was needed and my talent as a gadget maker was useful. And I know of at least one case where my love for this sport with the flight on my ninetieth birthday was the catalyst to get a former Air Cadet glider pilot back into the air. I hope it also showed that age is no limit to go and do badge flights, and the many flights in the back seat of the Blanik were a selfless contribution to soaring.

I'm honoured and humbly accept this award knowing that our Soaring Association felt I deserved it. Thank you."

Young pilots go gliding

focusing on the cross-country basics

Jason Acker, Chris Gough, Gary Hill

THE EDMONTON SOARING CLUB held its fifth annual Junior Development Camp 21-28 August, providing seven junior pilots with a safe environment to develop their soaring skills. We held our first Junior Camp in 2011 with much success and have continued with our club's commitment to attract, develop and retain youth in our sport.

The camp kicked off on the Friday with many of the pilots arriving at the club and getting settled into the bunkhouse. As a few of the Air Cadet pilots only finished their course in Gimli on Thursday, this meant they barely had enough time to get back from Manitoba, wash and change cloths and head out to Chipman. It was a windy overcast day, so we only managed to get six flights in before packing up. The day ended with a short review of the camp's goals, objectives, rules and responsibilities before sending the pilots off to unpack.

The official kick-off started on Saturday with Chris Gough (the camp director) making the formal welcome to the junior pilots, introducing the instructors and towpilots, and briefing on club operations and flight safety, and reviewed what the pilots could expect on the course. Chris gave a lecture on thermalling, which was all new for many of the cadets. The gliders were pulled out and briefings on the Daily Inspection were completed.

The camp is structured around a formal 4-6 flight program which emphasizes pilot decision-making, intro to thermalling, and flying proficiency. For the first few days, flights mostly consisted of covered instrument exercises, spins, stalls, spirals and boxing the wake. The instructors kept the students thinking and practising "SOAR" as they talked them into locations that required them to execute abbreviated or right-hand



Denise Vandekooi

Standing: Gary Hill (instructor), Grayden Kruk, Jason Acker (instructor), Chris Gough (Camp Director), and Caitlin Acker. Front: Chris Hobden, Luciano Di Blasi, Zach Bouchard. Missing: Adam Kent, Supul Jayasinghe.

circuits. Once the students complete the formal program, they are free to work with the instructors towards individual goals that could include a passenger-carry rating, back seat checkouts, FAI badges, or simply build time and experience with new aircraft.

Throughout the week, the junior pilots received daily lectures on topics ranging from how to read a tephigram, speed-to-fly, basic first aid after an accident, human factors and aviation physiology. The lectures were reinforced with opportunities for the cadets to deliver daily weather briefings, identify and discuss factors that could affect performance (such as anxiety around first off-field landing) and review flight safety incidents or scenarios.

As the week progressed, and with improving weather, they were able to take advantage of their training and the soaring conditions. By mid-week, most of the pilots had transitioned to the single seat gliders and would patiently wait for the first few cu of the day before racing to get into the air and explore the local airspace. Most of the junior pilots qualified for the C badge, and Grayden Kruk, a returning pilot from last year's camp, was able to complete his Bronze Badge. To encourage post-flight review and assist with debriefing solo flights, we introduced the junior pilots to the Online Contest and had 15 logged flights totalling 675 points and 536 km by the end of camp. This turned out to be not only an excellent tool for mentoring the junior pilots, but was another means to get them exposed to competitive soaring.

The camp provided them a great opportunity to put to good use the skills that they were being taught. On Thursday morning, the group practised rigging and derigging our PW-5. As the conditions for the day looked promising, a number of them decided to try and head out on some mini local cross-country flights. One of the pilots did not manage to make it back to the field, and the morning's derigging lessons and land-out practice was put to good use!

Unlike previous years, where we had a limited number of aircraft available due to unforeseen repairs, we had full use of ESC's fleet (3 two-seaters and 3 singles) at the camp this year. When coupled with great support from the instructors, we were not only able to host the junior pilots, but were able to allow our club's student members to come out and participate. Many of the ESC students took advantage of this, and by week's end we were able to successfully flight test two of our members (Dale Brochu and Karl Waskiewicz). It was a great training and learning environment for everyone and something that we will consider offering again next year.

Over the course of the week, the seven junior pilots flew 96 flights and accumulated over 37 hours of solo time and about 21 hours of instructional time on 229,000 feet of tows. Each participant averaged over 8 hours of solo time for the week, with flights averaging 37 minutes.

With one of our towplanes down from the gear collapse incident in the spring, our second towplane was running full out during the week until it developed an oil leak midway through the camp and had to be grounded. Thankfully, we were able to borrow PCK, the Alberta Soaring Council towplane. Without it, we would have had to shut down the camp early. We very much appreciate the support from ASC to help make our junior camp a success.

This camp would not have been the success it was without the support of the ESC Executive and the tireless efforts of our volunteer instructors (Jason Acker, Chris Gough, Gary Hill, Trevor Finney, Richard Lewanczuk and Guy Blood), our towplane pilots (Bob Hagen, Neil Siemens, John Broomhall, Rick Martin and Guy Blood) and the members of the club who helped host the junior pilots and operate the flightline trailer during the camp. It truly was a team effort!

Over the past five years, the ESC Junior Development Camp has been able to promote the sport of soaring and develop the skills of 30 young pilots from western Canada. It is difficult to assess the impact that this program has on soaring; while many of the attendees are not active with our SAC clubs, some do stop in every so often to fly with us and relive their camp days and to fill us in on what they have accomplished since we last saw them. Some have remained active



Gary Hill

Luciano Di Blasi going through the S-S-S-L-O-W check list during the simulated off-field landing practice at the Edmonton Soaring Club Junior Development Camp.



with the Air Cadet Gliding program and/or are pursuing careers in aviation. As our club considers how we might expand our activities to attract and retain young pilots, we are interested in talking with other Alberta clubs and with the ASC and SAC executives about how we might partner on future initiatives to develop our youth soaring program.

Here is what some of the young pilots had to say about their personal experiences:

Luciano I got back from the cadet glider course and the next day I headed over to Chipman for the Junior Soaring Camp. It was much like the cadet one, which brought with it a lot of new and useful skills. I started off flying my check flights in the SZD-50, also experiencing my first soaring flight in that aircraft with one of the instructors, and started to learn the basics of finding and centering a thermal. After a couple of flights on some of the other aircraft, I had my first one hour solo in the L-33. I became attached to the L-33 – the cockpit made you feel like you were wearing the glider, and gave it an attractive feel.

The camp let me experience soaring, and my belief is that the knowledge I gained was due to not only to the instructors, but the environment on and off the field with my course-mates, most I had already spent the summer with. It gave a much more enjoyable atmosphere. My fondest memories in the air are now with the L-33, having done long flights in which I had many opportunities to improve my thermalling and other more basic skills such as communication, awareness, and circuits. Spending the week flying all the different types of aircraft gave me a much broader understanding of soaring and of aviation as a whole. I'm looking forward to doing the camp again next season and perhaps do my first cross-country in the L-33, a small, nimble and fun aircraft.

Zach Almost all glider pilots will eventually land out. Much to my surprise, by the end of the Junior Soaring Camp I became one of them. Coming from the cadet program, we talk about landing out, but the environment is so controlled that there is no way you could ever do it. That's kind of the attitude I had coming off the Glider Pilot Scholarship – no matter what I did, I would always be able to make it back to the airfield. On the 27 August, that changed. It was one of the last days of the Junior Camp, so we had decided to do some derigging and off-field landing practice for the Bronze badge. We derigged the PW-5 as it's probably the easiest, which was very convenient considering that's the glider that I ended up landing out in. The other plus of that day was the fact that on the flight before I did a practice landout with one of the instructors in the Puchacz.

So it appears that I was fated to have a landout that day, as I had all the training I could have to prepare myself for it. Coming from the cadet program, where we don't actually practise off-field landings, it was terrifying. I got that sinking feeling in

my stomach as I realized that I didn't have enough altitude to make it back to the airfield, and there was a moment of panic where I just kind of blanked. A million things flashed through my mind, and I could barely breathe. I can't explain it, but something just kicked my brain into action. My eyes darted around, looking for an appropriate field that was flat, had a low crop, no hill and no obstacles. I found one right away and set up my circuit and radioed Chipman ground with my approximate location in relation to the field.

I had made my decision to land a little late, and consequently was low in my circuit, low enough where I just had to cut straight into the field on downwind. I landed safely, and called one of my friends at the camp and sent him a picture of where I was on Google maps (only about a mile and a half north of the field) and they came to get me. We derigged the glider fairly quickly, got her loaded onto her trailer and were back home in no time.

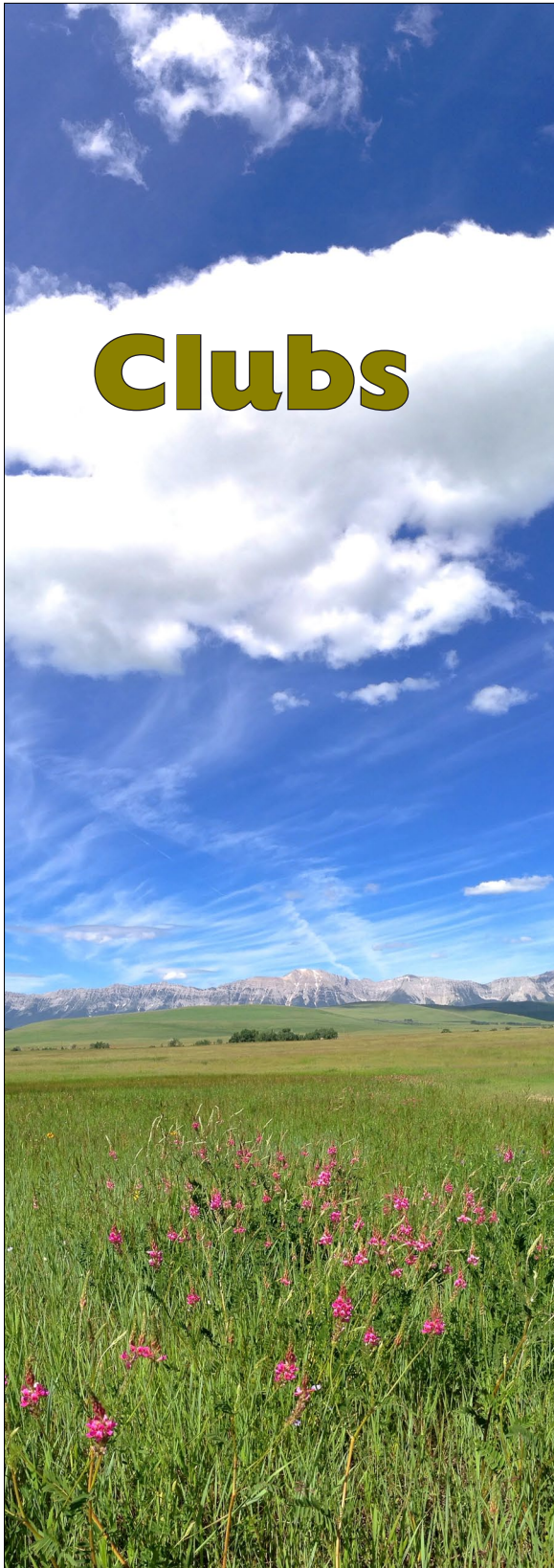
Of course I got a bit of a lecture from the instructors about paying attention to altitude and doing final glide calculations, but they weren't mad at me. We mostly just laughed at it considering all we had done that day concerning landouts. Besides, both the glider and I were safe, and I got a lot of experience and one hell of a story to tell out of it.

Adam I came to the Edmonton Soaring Club on Chris Gough's recommendation after having done two Junior Camps and a summer of towing at SOSA Gliding Club. From the moment I walked onto the grounds, I felt very much at home with the hospitable and welcoming members. The club's diverse and large fleet, for the size of the club, made quite a positive impression on me. I was also impressed by the feverish pace the towpilots maintained in order to ensure a consistently smooth operation. Having towed at SOSA, I can appreciate the pressures felt by the pilots when the field is as busy as it was during the camp.

I had an outstanding time over the course of the camp and would absolutely recommend ESC to anyone who wishes to experience the joy of soaring in its fullest capacity.

Graydon This year's camp was wonderful! I'm grateful for the opportunity to have attended my second soaring camp. The instructors taught us the differences in the programs, and I was able to complete my goals for the camp. The brand new Perkoz they received is very slick and I can't wait to do aerobatics in it. The camp gave me the opportunity to expand on my skills and continue to learn more in soaring. I was able to record some flights on the OLC and managed to achieve my first 50 km triangle in the ASW-15. It was a great camp and I can't wait for the next one.

Thank you to all the instructors at Edmonton Soaring Club for all the work and dedication in providing this incredible opportunity. □



Clubs

Lethbridge

TWO years into this journey for our new club and we've been making great time! Last year we were nomads visiting Claresholm, CAGC, ESC, and Cu Nim. This year we've made a home: an oasis in the valley heat, a spectacular lennie sunset kind of home.

We bought and erected a fabric quonset at Cowley, acquired a quad to pull gliders, and gained a few new members with new energy. As a club we decided our future included being part of the *Freedom's Wings* program. Then a dream came true. A two-seat glass training glider seemed an improbable hope for a startup club, yet suddenly it has become a reality. Starting from a phone call I made to Charles Petersen at York Soaring, culminating in Geoff Minor hauling it home from there, the *Freedom's Wings Canada* Twin Astir C-FNUO has found a new home with us at Cowley. Over the next few years we will raise the funds to pay for it.

Dedicated members have made these huge leaps possible. We basked in flights climbing to 18,000 feet and lasting to 3.6 hours in our "NU" ship. The fall ASC wave camp treated several of our members to flights they've been dreaming of for years. Only a fellow pilot can appreciate how elating and simultaneously humbling it is to be in the back seat on someone's dream flight. Those flights reminded us why we're so passionate about this sport and opens our eyes to the possibilities this coming spring.

Big projects and bigger ambitions are coming! We will be finishing our quonset doors, adding rails for gliders, and slowly raising funds for parachutes, an oxygen system, a large high resolution screen for simulator use, and other improvements. The ditch at the end of runway 21 will be filled and runways 21 and 11 will be extended at both ends for launching and winch access. We'll have the longest runways for winching in Alberta with the most options. Winter training on the simulator will give giddy anticipation for flights next year.

Though this season did not see first solos or flight tests for our club, we did have a few badge claims. Geoff, our president and new instructor this season, managed his Silver Distance and Gold Altitude. Me, still a novice with ninety hours total at the start of the season, managed to make claims from C, Silver, Gold, to Diamond distances, duration, and altitude gains to complete all three badges this season. You will be able to read the complete story about how that happened in this winter's *Free Flight* magazine.

Making Alberta my home only two years ago, the gliding community has been a welcoming one. Each year the flying has resulted in new personal bests for me and my clubmates. Next year promises to be no exception.

Pavan Kumar

Cu Nim

How do we measure success? Not a trivial question – easy to ask, difficult to answer. Some may approach it by measuring annual revenue. Some may want to track number of tows per day or per year, and perhaps membership levels. While all these parameters are valid and should be monitored in a club management so it is financially stable, I prefer to apply the happy/energy meter. As subjective it may sound and be, a vibrant club is felt as such. It radiates energy and dynamism. I can't quantify club success with my own personal happy meter, but I can tell you if we are enjoying what we do... that is to be among fellow pilots and spend as much time possible in the air, that is success. By the way, while I am writing these words, I can still feel some tiredness after instructing in the morning and climbing on a scaffold to put up our new storage hangar during the afternoon along with a bunch of members. This is what I mean by energetic... our club feels vibrant.

In 2014 we had several ideas of how 2015 may come to be, but we never expected to achieve so much as we did. Indeed we were busy and some members devoted an incredible amount of time, but here we are with a feeling of achievement. The year started early on with all the related planning and instructing towpilots to become familiar with our new Cessna 182 towplane. The club decided that our older Scout needed an upgrade since gliders kept on growing in size and weight. We needed more power! Almost all the towpilot team is now familiarized and enjoy flying PZE and we glider pilots are enjoying a better towing experience overall.

As the year began, we had a student week with four keen students out of a pool of a bit more than 20. The large number of students kept us busy, although some days were surprisingly low on student flying but then we raised the scheduled intros we then flew.

One of the keys to keeping a club vibrant is cross-country. Several studies in Europe have shown this and it deserves an increasingly amount of attention from the executive. Executives must promote cross-country flying and keep their licensed pilot group happy. In response to this we organized three mayor events. There were two safety seminars directed to cross-country flying and high altitude flying in mountain wave. They were well received and refreshed us with new knowledge from some of our more experienced pilots. The third event was an advanced instruction week directed by Dan Cook, the SAC Flight Training chairman. It was composed of two courses of around four to five pilots each. The course is directed to learn to deal with unusual situations and emergencies. What a delight to go through it. We learned more on spins, low rope failures, flying with no instruments or partially working controls and outlandings with obstacles at the beginning of the field. This initiative is a must-do and next year we will absolutely organize it again.

Remember, keeping your licensed long-time pilots interested and safe is key to develop a good cross-country culture. It feels very good to see Cu Nim coming back to its cross-country roots, as CFI Allan Wood said.

A major drawdown on the happy meter is time or what may feel as wasted effort. Personally I see two major time "black holes" in gliding, these being rigging or derigging, and the commute to and from the club. As such, and as a materialization of a plan that started some years ago, three new private hangars were built at the club this year. This would not have been possible without the energy of Chester Fitchett, lebeling Kaastra, and Mark Bowman. They put together a plan with the help of one of our long time members John Kopala, and three T-hangars are now finished on the south side of our property. Think of this, no more rigging and derigging time for these pilots – just arrive, DI and go, with two more available hours for flying under their belt each day! What a win/win situation! The solution for the second "black hole" time waster is being worked on now. We received the donation of a very nice trailer from one of our long time members. We are planning on having it for accommodation for guests, students and licensed members who want to spend the weekend at the club, but previously could not. In essence more time to enjoy... less time driving.

A third drawdown on the happy meter is the time devoted to field maintenance usually concentrated in a small group of members who felt comfortable handling the tractor and mower. Harry Koehler, our field maintenance coordinator, upgraded the mowers. We now own a couple of smaller race car looking mowers that are easy to handle and indeed fun to drive. Harry got members signed out on the use of the new mowers and out they went spending hours cutting grass and maintaining the field. This surely was an innovative way of distributing the workload. As a complement to the field maintenance program, the club had the opportunity to buy a fabric shed that previously belonged to the Foothills Search and Rescue group. The building is being set up as I write and will be able to keep the tractor, mowers, and other equipment safe and out of the weather.

Some years ago we started a serious fleet renewal. I feel that we have achieved that with the Cessna 182 towplane, ASK-21, DG-1000S, DG-303 Elan, and our long time lady, Funny Girl, a Jantar. Now it's time to shift gears in our long term strategic development plan and focus on the next two items, improving instruction efficiency and club infrastructure.

It has been a wonderful year, lots of flying, safe operations and we have had tons of fun being together. For me this is the definition of success. See you in 2016 for another year of fun and friendship. It has been a pleasure to serve Cu Nim as its President this year. Thanks for the opportunity.

Pablo Wainstein



Chester Fitchett

Designed by John Kopala and built by Chester Fitchett and John, this new hangar at Cu Nim is owned by Chester, Mark Bowman and Iebeling Kaastra. The structure is rough cut 2x6 and 2x10 with metal cladding. The three bays overlap the area for the wings. Each structure is free-standing, with each member having their own lease agreement with the club.

The opportunity to have a storage building for Cu Nim's field equipment came up in June. All we had to do was take the building down, move it to our airfield and reconstruct it in an appropriate spot. Taking the structure down was much easier than putting it back up.



Phil Stade

Central Alberta

Our club had a great season and had many new members join. This was the first full season with our new training fleet of the L-23 and the Puchacz, and they generated added enthusiasm for flying. It was also a season when we tried to concentrate on flying instead of hangar repairs, and that also generated more flying.

Several of our students accomplished their first solo, and we licensed another member this year. Their accomplishments can be found in this issue. No significant incidents or accidents occurred this year and that is a tremendous deal when sharing runways with itinerant traffic and a skydiving school. Every year the airport seems to get more and more traffic, which adds an extra load to pilots and students alike.

With the Canadian Nationals being held in western Canada this year, CAGC decided to be the host club. The venue was chosen to be Olds-Netook Gliding Center as opposed to our home club at Innisfail airport mostly to avoid all the traffic described above. A very big thank you to the Air Cadet League of Alberta for allowing us to use their great facilities. We may try and hold an annual contest there each Canada Day long weekend, standby for more details. We all pulled together to organize and prepare the facility to make it contest-friendly, and our whole operation moved to Netook.

All we needed to make it a grand success was appropriate weather. Optimism was high but Mother Nature fell a little short of ideal – the contest even needed to be extended an extra day to make it official. The whole story is fully told in the 2015/3 issue of *Free Flight*.



John Mulder

CAGC's Puchacz on display at the Innisfail Flying Club fly-in breakfast during the Nationals.

With few of our club members having any exposure to contest soaring the whole experience was an eye-opener. The social planning and participation of the Air Cadet Squadrons and community groups ensured we were well fed. The movie nights were fun, watching hockey playoffs on the big screen in the briefing room was unique to a gliding contest too I'm sure. It was special having some faces from contests past participate in the organization, and an appearance at the pilot meeting by Justin Wills was a special treat. Thanks to everyone who came out and helped or participated. Even with the poor weather we think everyone left happy, maybe only because they were leaving the wet weather behind?

It is always interesting to see the diversity of our membership coming together with a common interest. We try and provide a welcoming environment and incorporate social activities into our gliding weekends by holding BBQs and community breakfasts while participating with the Innisfail Flying Club in their social activities too.

We have our season clean-up and AGM planned, and although we have flown into November, the season is probably coming to a close, but this was probably one of our most successful flying years in our 26 years of existence. We are looking forward to improving that again next year!

Drew Hammond

Edmonton

As is usually the case, the 2015 flying season at the ESC had its share of ups and downs. On the upside, we had a very good year for new students. Six students soloed, and four of them obtained their Glider Pilot Licence. Obviously we're all proud of these achievements and congratulate our new pilots, but all this teaching came at a significant toll to our instructors. Although we have a good-sized list of licensed instructors, the number of active instructors was fairly limited this year, resulting in a heavy load for those who were available. And while we added two instructors to the roster last year, this year we weren't so fortunate. There is an obvious need to get more of our pilots to become instructors. Thankfully, several members have expressed an interest, and an instructors' course is high on the ESC priority list for 2016.

I would like to highlight a few of our other major accomplishments. Chris Gough and Bruce Friesen once again set a few records, most on the same weekend! In a borrowed Jantar no less, Chris completed a 750 km triangle, setting several personal, club, and national records, and it was the best OLC flight in Canada. Bruce flew a 400 km triangle at a speed (134 km/h) that also broke several class and national records. Bruce has earned the national trophy for the six best flights in 2015, and was the second highest scoring Canadian on the North American OLC. Very well done, gentlemen!

The ESC was also well represented at the 2015 Nationals which were held at the Netook airfield near Olds, which is operated by the Alberta Air Cadet League, with CAGC hosting the event. The ESC was happy to support the event with volunteers and by buying a good number of cases of the beer especially brewed by the Olds College Brewery! Trevor Finney, Bruce Friesen and Chris Gough competed and they did our club proud.

We also offered the fifth annual Junior Camp in August, and were pleased to welcome seven participants. Their story is told in this issue. They flew a total of 96 flights, and each participant averaged eight hours of solo time for the week. Most attendees qualified for the FAI C badge, and one Bronze badge was achieved.

Our fleet is progressing as we managed to get our new Perkoz (C-GPKZ) in the air in the spring! It was a great joint effort between the importer, ESC members, our AME, the Minister's Delegate and folks from the regional Transport Canada office in Winnipeg to get all the necessary paperwork in place. We bought the aircraft with 20 meter wing extensions which had to be certified, which resulted in a slight delay, but was accomplished in mid-summer. Many members are now signed off to enjoy this new ship, which, not surprisingly, is proving to be very popular. Unfortunately, PKZ sustained substantial storm and water damage to the canopy and cockpit during a heavy rainstorm at the Cowley fall camp. This event occurred very close to our seasonal shutdown weekend, which means that we didn't lose much, if any, flying time and we have the winter to repair the aircraft.

We experienced some serious challenges with our towplanes this year. Right at the beginning of the flying season, AVL, one of our two Pawnees, experienced a landing gear collapse which damaged one wing and also resulted in a prop strike. The required extensive repairs made it impossible to



Lauren Troppmann

The Perkoz is rigged for the first time at ESC.

get the aircraft back into service for the rest of the season. During the August junior camp, our other Pawnee, SFL, developed a leaky oil cooler which grounded the plane for several days. Thankfully, us kind folks in the Alberta Soaring Council allowed the Scout (PCK) to fill in. I strongly believe that the Alberta soaring clubs are extremely fortunate to have our "provincial" towplane at our disposal for emergencies like we experienced here.

In other developments, the ESC is proud to be involved in the Edmonton chapter of *Freedom's Wings Canada*, a national organization that provides people with disabilities the opportunity to experience recreational flying. To support these objectives and attract people with disabilities, the ESC decided in 2014 to make our club house accessible for the disabled. We were successful in obtaining a cost-matching provincial government grant towards this project. A big thank you to Kary Wright and Bill Mundy who have put uncounted hours into designing the needed changes, working with suppliers and contractors and, with the help of other ESC members, putting up a lot of sweat equity. Once it's all said and done, we will have a new deck with a wheelchair ramp to get into the club house, and a fully accessible washroom.

Time to celebrate our successes and work hard at overcoming the challenges thrown at us this year, and look forward to another exciting season in 2016!

Thorsten Duebel

2015 pilot achievements

Solo

Kent Blagg (Cu Nim)	Stephen Sorbie (CAGC)
Dale Brochu (ESC)	Judy Soroka (CAGC)
Steve Cheverie (ESC)	Denise Vanderkool (ESC)
Mark Dobroski (CAGC)	Karl Waskiewicz (ESC)
Keith Gwynne (ESC)	Maarten Zijlstra (CAGC)
Jordan Lewis (Cu Nim)	

Badges & badge legs

Jason Acker (ESC) – all legs of Silver
 Luciano Di Biasi (ESC) – C badge
 Dale Brochu (ESC) – C badge
 Zach Bouchard – C badge
 Peter Cromer (Cu Nim) – Silver height
 Chris Gough (ESC) – 750 km Diploma
 Keith Gwynne (ESC) – C badge
 Chris Hobden – C badge
 Adam Kent – C badge
 Grayden Kruk (ESC) – Bronze badge
 Pavan Kumar (LSC) – C badge, and all (!) legs of Silver
 Gold and Diamond badges
 Aaron MacDermand (ESC) – C badge
 Geoff Minors (LSC) – Silver dist, Silver & Gold height
 Matt Swain (Cu Nim) – Silver & Gold height
 Ray Troppmann (ESC) – all legs of Silver
 Denise Vanderkool (ESC) – C badge
 Karl Waskiewicz (ESC) – C badge, Silver height

Canadian records

Bruce Friesen (ESC) – 400 km triangle speed for Open & 15m (134.2 kph), Club (124.8 kph)
 Chris Gough (ESC) – free triangle distance for Open, 15m & Club (777.1 km)
 – triangle dist, Club (750.2 km)
 – 750 triangle speed, Club (98.4 kph)

Licence

Dale Brochu (ESC)
 Pilar Cifuentes (Cu Nim)
 Rafal Dzwonek (Cu Nim)
 Jordan Lewis (Cu Nim)
 Aaron MacDermand (ESC)
 Denise Vanderkool (ESC)
 Karl Waskiewicz (ESC)
 Maarten Zijlstra (CAGC)

The last solo of the season goes to Kent Blagg at Cu Nim. Yahoo!

OLC – club results

Cu Nim	21,266 km	129 flights
	13 pilots	22,222 points
Edmonton	13,206 km	87 flights
	16 pilots	15,418 points
Lethbridge	4201 km	49 flights
	4 pilots	4201 points
Central Alberta	975 km	7 flights
	1 pilot	937 points

OLC top 10 – best 6 flights

(flights from Invermere included)

Bruce Friesen, ESC	4356 points
Steve Hogg, Cu Nim	2845 points
Chris Gough, ESC	2553 points
Tony Burton, Cu Nim	2458 points
Phil Stade, Cu Nim	2312 points
Gerald Ince, Cu Nim	2135 points
Struan Vaughan, Cu Nim	1934 points
Pavan Kumar, LSC	1027 points
John Mulder, CAGC	937 points
Ray Troppmann, ESC	740 points



Congratulations to all on these steps along the way.

What's your personal goal for 2016? – it's hard to improve without having one.

return address
Box 13, Black Diamond, AB T0L 0H0

