



SKYWORDS

BURLINGTON RADIO CONTROL MODELERS

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Apologies to all. The last Skywords was published the 1st Quarter of 2021 with plans to publish a version every Quarter. Unfortunately this did not occur as not much was happening due to Covid 19 and I was also suffering from Covidites.

At this time it looks like we have an exciting year flying in store for us.

I, on behalf of you all, congratulate the new Board. They are certainly interested in getting things done and have already sent out their first Survey. Did you complete it? If not, why not? It only took a minute or two. We owe the Board our support wherever we can give it. I trust and hope that each of you will do your bit to support their ongoing efforts to make the club the best that it could be and provide flying enjoyment for us all.

It's Your Turn, Speak Up

The following letter was sent to MAAC by Gord McTavish who is one of our members. It raises several points which I will comment on after this letter. If you have any comments please forward them to:
skywords@brcm.org

November 20, 2020
Peter Schaffer
President
MAAC
Unit 9, 5100 South Service Road
Burlington, Ontario
L7L 6A5

Peter, we have not had the pleasure of meeting, but I have been a long time modeler and long time member of MAAC. My MAAC # is 3136 and have been a part of many RC clubs including the St. Catharine's Model Flying Club, Hamilton Flying Tigers, Dundas Flyers, Milton Valley Flyers, and now with the Burlington RC Club. I have also been a co-founder of the Dundas Flyers, and the founder of the Milton Valley Flyers. I got my start as a youngster in St. Catharine's through a program sponsored by the St. Catharine's Model Flying Club. That was a long time ago.

Like many of the senior modelers in Canada, I have been watching the decline of the participation of youngsters in our hobby. I have seen it in the decline of membership in clubs, and also in the decline of

participation in events sponsored by local clubs. I am in my 70's and see that if we do not have a "NATIONAL YOUTH MODELING PROGRAM" we will see our hobby be devastated through losses of our seniors and lack of interest from the youngsters.

As a result, I want to ask you if MAAC would "fund" an effort to build and implement a "National Youth Modeling Program"?

I have discussed this idea with many of my senior colleagues and we believe we can build a "National Youth Modeling Program" to address this very serious issue.

We would see the "National Youth Modeling Program" have the following key elements:

1. Tie local RC Clubs and the local communities across Canada into this program
2. The goal would be to introduce a building program during the non flying months
3. A flying program during the flying months
4. Regular coverage in the MAAC magazine
5. A budget of \$25,000 to launch and run this program

Peter, would MAAC be willing to "fund" and "support" this "National Youth Modeling Program"?

Naturally, if MAAC would support this program, once the program has been developed it would be presented to MAAC for approval.

Peter, let me know if MAAC would support such a "National Youth Modeling Program"?

Regards

Gordon McTavish

Where Does MAAC Figure into the Future of the Hobby?

The preceding letter to MAAC's president from club member Gord McTavish raises some interesting questions. I posed a few in the last issue when I asked "What are our social responsibilities".

Where does MAAC figure into the future of the hobby?

Let me say upfront that in my opinion MAAC can play a critical role in the hobby although it is my understanding that many clubs, particularly in western Canada are not members of MAAC. I stand to be corrected on this point. I also know that many RC Flyers do not share this view, that MAAC can play a critical role.

I believe that MAAC has recently demonstrated some forward thinking with the development of their online system and making the online payment of dues available to their members. In addition, they continue to support club events and provide insurance and Government Flight Exemptions for its members. Recently they have made viewing of meetings available to all members who want to take advantage of this. In addition, the majority of their safety documents are well and clearly written and can be adopted by many clubs.

But the fact remains that at least in my understanding their membership is dropping annually and it does not appear that many younger members are joining existing clubs. This is not unique to the air arm of radio control as I understand that the boating community is experiencing a similar decline.

I think that I have made it known over the years that I think this is a great hobby focusing on critical life skills. In fact I totally agree with the sentiments expressed in Gord's letter and would go so far as to say that I think a course should be introduced at the secondary school level that involves the construction of a radio controlled

vehicle of some type. This would provide an opportunity to integrate curriculum as well as demonstrate where some of the theoretical principals discussed in physics and mathematics classes can be applied. I studied electricity as a part of physics courses I took in high school and dedicated courses in university, yet I was at a loss (an still am) when I transitioned from Glow Systems to Electric Powered Flight. Common questions that students correctly raise are “Why do I have to learn this?” and “Where will I ever use this?” In the case of mathematics the answer downed on me 2 years ago, far too late to do any good.

My opinion is supported by the following article that appeared in McLean’s Magazine a few years ago. JPL which features prominently in the recent movie The Martian starring Matt Damon is managed by Caltech for NASA. Both are very interesting stories if you wish to read about them.

I personally worked with a 40ish person who had never used an electric drill.

What do you think about all this?

[The mechanically challenged generation](#)

By Macleans.ca | August 29th, 2011 | 7:42 am. **PRINTED WITH THE PERMISSION OF THE AUTHOR**

Young people today can't hold a hammer or screw a screw

By Cynthia Reynolds

It’s hard not to laugh when Barry Smith starts telling stories about the hapless young workers he has to deal with. Smith, who runs Toronto-area roofing company RoofSmith Canada, tells of one who didn’t come to work because his cat had fleas, and another who jumped off a shed roof, even though he’d just tossed bags of nails into the garbage bin below. But the laughing tapers off when Smith, 46, talks about skills.

“They don’t know how to handle a tool properly,” he says quietly. “They’re bright kids, but they hold a hammer at the top instead of the bottom, so it takes four swings instead of one to get a nail in. They don’t know how to read the short lines on a tape measure and they’ve never used power tools, which makes you really cautious.” He says they can’t seem to detect the patterns of the work—you rip up part of the roof, that gets thrown down, that goes into the garbage—so they just stand around. “It can get really frustrating.”

There’s much talk about a coming crisis in the trades—that we simply don’t have enough new recruits to replace an aging workforce. By some estimates, Canada could face a shortfall of up to one million skilled tradespeople by 2020. To address this shortage, the government is funding a variety of incentives to attract young talent and it’s beefing up our apprenticeship training programs—registrations are at an all-time high. But a stumbling block has emerged that’s getting harder to ignore: by all accounts, we have the least handy, most mechanically deficient generation of young people. Ever.

It’s easy to see why.

Shop classes are all but a memory in most schools—a result of liability fears, budget cuts and an obsession with academics. Still, even in vocational high schools where shop classes endure, a skills decline is evident. One auto shop teacher says he’s teaching his Grade 12 students what, 10 years ago, he taught Grade Nines. “We would take apart a transmission, now I teach what it is.” Remarkably, most of his Grade 11 students arrive not knowing which way to turn a screwdriver to tighten a screw. If he introduces a nut threaded counterclockwise, they have trouble conceptualizing the need to turn the screwdriver the opposite way. That’s because, he says, “They are texting non-stop; they don’t care about anything else. It’s like they’re possessed.”

At home, spare time is no longer spent doing things like dismantling gadgets, building model airplanes or taking apart old appliances with dad; there's no tinkering with cars, which are so computerized now you couldn't tinker if you wanted to. A 2009 poll showed one-third of teens spend zero time per week doing anything hands-on at all; the same as their parents. Instead, by one count, entertainment media eats up 53 hours a week for kids aged eight to 18. As for those new apprentices? They're signing up and then they quit. Depending on the province and trade, some 40 to 75 per cent drop out before completing their program.

In Nisku, Alta., John Wright, the technical supervisor at manufacturing company Argus Machines, oversees 12 apprentices in the welding, machinist and millwright trades. Three years ago, he started noticing two tiers of applicants, those with basic mechanical skills and a new crop who, as he says, had no clue what they were doing. He speculated the disparity stemmed from their upbringing.

“The ones from the farm community weren't afraid to get in there and get dirty. They could figure out basic repairs. And when you have to feed the chickens and milk the cows every day, you learn how to show up to work on time.” Those who didn't have hands-on experiences couldn't grasp basic nuts-and-bolts mechanics, they couldn't solve simple problems. Worse, they lacked the same work ethic, which made them too difficult to train. The implications reach well beyond the trades.

Occupational therapist Stacy Kramer, clinical director at Toronto's Hand Skills for Children, offers one explanation for what's happening. It begins with babies who don't get put on the ground as much, which means less crawling, less hand development. Then comes the litany of push-button toy gadgets, which don't exercise the whole hand. That leads to difficulty developing skills that require a more intricate coordination between the hand and brain, like holding a pencil or using scissors, which kindergarten teachers complain more students can't do. “We see 13-year-olds who can't do up buttons or tie laces,” she says. “Parents just avoid it by buying Velcro and T-shirts.” Items that—not incidentally—chimpanzees could put on.

When the first apes climbed down from the trees to explore life on the ground some three million years ago, it was their hands, no longer used for branch swinging, that helped trigger our evolution. Hand structure changed, enabling us to perform increasingly complex grips. The conversation between hand and brain grew more complex, too. We advanced to the unique ability to visualize an idea, then create that vision with our hands. That's meant everything from developing tools to imagining airplanes to performing open-heart surgery. So what happens if that all-important hand-brain conversation gets shortchanged at a young age? Can it be reintroduced later, or does that aptitude dissipate?

“We don't really know,” says neurologist Dr. Frank Wilson, author of *The Hand: How Its Use Shapes the Brain, Language and Human Culture*. “That research wouldn't get through an ethics committee, even though it's happening on a massive scale in our homes every day.” We only have these uncomfortable clues, such as young people who can't visualize how to best wield a hammer. Or teens who, despite years of unscrewing bottle tops and jars, can't intuitively apply the righty-tighty, lefty-loosey rule of thumb.

Predictably, this is affecting other industries that depend on a mechanically inclined workforce. After NASA's Jet Propulsion Lab noticed its new engineers couldn't do practical problem solving the way its retirees could, it stopped hiring those who didn't have mechanical hobbies in their youth. When MIT realized its engineering students could no longer estimate solutions to problems on their own, that they needed their computers, it began adding remedial building classes to better prepare these soon-to-be professionals for real-world jobs, like designing airplanes and bridges. Architecture schools are also adding back-to-basics courses. As for the trades? Veterans like Barry Smith have little choice but to attempt to nurse a hands-on ability among new recruits one hammer faux pas at a time, teaching the next generation of trades people just how to hit a nail on the head.

MATH PROBLEM FROM LAST ISSUE

Last year we posed a math problem for our mathematically inclined flyers. The problem and the solution follows.

A plane is flying directly away from you at 500 mph at an altitude of 3 miles. how fast is the plane's distance from you increasing at the moment when the plane is flying over a point on the ground 4 miles from you?

SOLUTION 1

However, since we are only interested in the magnitude of the velocity, let us take the absolute value and remove the negative sign. Now, we simplify, and the equation becomes:

$$\frac{dr}{dt} = \frac{(500^2)t}{\sqrt{9+(500t)^2}}$$

Now, we must find the value for t . This is a most simple matter, as we simply use the formula $4 = 500t$ and we find that $t = \frac{4}{500}$.

When we plug in that value, we find that

$$\begin{aligned} r' \left(\frac{4}{500} \right) &= \frac{(500^2) \frac{4}{500}}{\sqrt{9 + (500 \frac{4}{500})^2}} \\ &= 400 \text{ mph} \end{aligned}$$

Given the well-known formula for distance as a function of time (when the speed is constant), the horizontal distance traveled by the plane is:

$$s = 500t$$

Hence, we know that the distance from you to the plane as a function of time, let's call it $r(t)$, takes the form (using the pythagorean theorem):

$$\begin{aligned} r(t) &= \sqrt{3^2 + s^2} \\ &= \sqrt{3^2 + (500t)^2} \end{aligned}$$

Now, let us take the derivative with respect to t , to calculate the *change* in r over the change in time, or the speed at which the distance changes. Here we use the chain rule.

$$\frac{dr}{dt} = \frac{-1}{2\sqrt{9+(500t)^2}} 2(500)^2 t$$

SOLUTION 2 – Using Differential Equations

Because the plane is in level flight directly away from you, the rate at which x changes is the speed of the plane, $dx/dt = 500$. The distance between you and the plane is y ; it is dy/dt that we wish to know. By the Pythagorean Theorem we know that $x^2 + 9 = y^2$. Taking the derivative:

$$2xx' = 2yy'.$$

We are interested in the time at which $x = 4$; at this time we know that $4^2 + 9 = y^2$, so $y = 5$. Putting together all the information we get

$$2(4)(500) = 2(5)y'.$$

Thus, $y' = 400$ mph.

Drones Tracking in Northern Ontario

FROM THE BAY TO DAY

A search of the wooded area was conducted by the K9 Unit and ERT members resulting in the driver being tracked down and arrested



OPP used drone technology to investigate today's traffic accident on Highway 11 North. File photo

OPP say they used a drone and a K-9 unit this morning to catch a driver involved in a fatal collision on Highway 11 north near Englehart.

FROM CLUB TO MEMBERS



On behalf of all club members I would like to echo former Club President Mike Block's note of appreciation to the runway committee for the outstanding work that they have done in refurbishing the field which is a major draw in the area. I have been told that we acquired a number of new members do to these repairs.

The committee was made up of Ashely Armstrong (chair), Barry Parkinson, Geoff Norman, Bill Ayre, and Brian Harrington. A special thanks to Brian Harrington who worked in the construction industry at one time and I understand was instrumental in selecting the Company that did the repairs and overseeing the work.



Brian Harrington in front of runway as work is being carried out.



OUCH!!



An abandoned ship that caught fire in the mid-Atlantic last week was carrying \$401m (£295m) worth of cars, including Porsche, Audi, Bentley and Lamborghini models, an insurance estimate has revealed.

Felicity Ace, a specialist cargo ship carrying more than 4,000 cars, caught alight near the Azores on Wednesday evening. The vessel's 22 crew members were evacuated but the fire continued to burn for several days, fuelled by **lithium-ion batteries** in electric vehicles on board.

Insurance experts at Russell Group said on Monday they estimated that \$438m of goods were on the ship, including an estimated \$401m of cars and goods vehicles.

Suki Basi, the group's managing director, said the incident would result in losses of at least \$155m for Volkswagen, which owns Porsche, Audi, Bentley and Lamborghini.

The ship's operator, MOL Ship Management (Singapore), said on Monday that the vessel was "still assumed to remain on fire south of the Azores, drifting further away from the islands".

It said two firefighting tugboats were due to arrive at the site of the ship on Monday and would "start spraying water to Felicity Ace together with the patrol boat with the initial salvage team onboard already on site to cool down the heat from the vessel".

The company said the ship remained stable and was not leaking oil. Another salvage craft with firefighting equipment is due to arrive from Rotterdam on 26 February.

João Mendes Cabeças, the captain of the nearest port in the Azorean island of Faial, told Reuters over the weekend that **lithium-ion batteries** in the electric vehicles were "keeping the fire alive", adding that specialist equipment was required to extinguish it. It was not clear whether the batteries sparked the fire.

VW has not commented on how many of its cars were on the ships. The automotive enthusiast website The Drive reported that the ship was carrying 189 Bentleys.

NOTE: IT HAS SINCE BEEN ANNOUNCED THAT THE SHIP SHANK WITH ALL CARGO ON BOARD.

DANGER

WARNING

As we all start our flying season certain things are imperative. Make sure you check all the control services and electronics on each of your models before you take them up.

I also learned the importance of having your failsafe set properly while walking through the pit area last year and experiencing a situation where one was not set up properly. This is so important that MAAC has a special procedure on their Website to address it.

MAP 11 - Setting the Fail-Safe Feature on Modern R/C Equipment



This document contains information and suggestions that while not mandatory are never-the-less important advice for all MAAC members. To ensure that you have the latest version always check the MAAC [Web Site](#).

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- 1.0 Title. MAP 11 – Setting The Fail-safe Feature On Modern R/C Equipment**
 - 2.0 Purpose. To explain the need for proper setting and testing of the fail-safe feature and to note the potential dangers of an improper fail-safe setting.**
 - 3.0 Definitions Glossary of Terms.**
 - 4.0 Discussion / Background.**
 - 4.1** Many modern R/C systems have a built in Fail-Safe feature that enables the operator to preset parameters such as throttle position to return to a safe setting in the event of a loss of contact between the transmitter and the receiver.
 - 4.2** An improperly set fail-safe can be very dangerous where loss of radio contact could result in the unplanned start or advance to full throttle of the engine or electric motor.
 - 5.0 Conclusions and Recommendations.**
 - 5.1** All members should ensure that R/C systems equipped with a fail-safe feature are properly set and frequently tested.
 - 5.2** Manufacturer's recommended procedure should be followed to set and test the fail-safe.

To test your failsafe system:

1. Turn on your transmitter.
2. Make sure your aircraft is safely secured and will not move under power.
3. Arm your aircraft.
4. Turn up your throttle until your propeller/motor is just active.
5. Turn off your transmitter.
6. If your failsafe is properly set you motor should stop within a few seconds. If it does not then your failsafe is not set up properly. Turn on your transmitter and when contact is established with your receiver shut down the system and make the necessary corrections.

SEEK HELP IF YOU ARE NOT SURE HOW TO DO THIS.



Bayview in Review

A DIFFERENT PERSPECTIVE

As many of you are aware, in the past there have been complaints from the Dog Park of club pilots over flying the dog field.

Recently I had occasion to take my son's dog to this Dog Park. I was surprised to see how close the park was built to our guide pole which marks our flight line. As beginners we are told to use this pole to line up our approach when flying a clockwise circuit.

If in doing so, we over fly this pole we may find ourselves over Dog Park Air Space. More thought should have been put into the Dog Park expansion of a few years ago, but there may be a reason for it being built as it is.

Maybe the Wings Program should make a tour of the Dog Park one of their items.

Flight Line

Line Up  Pole

Dog Park Fence Line



Today's Focus is on Ian Brown who everyone should get to know.

Ian has a wealth of experience and is very much involved with the operation of the club. He has sat and is currently sitting on the Club Board.

I often tease him about still not being able to speak English to which he says that he speaks English perfectly. My problem is that I speak Canadian.

Ian was too shy to provide a picture but make sure you make his acquaintance at a club meeting or at the field.

Ian was born in Bedford Town U.K. and lived there until 1973 when he moved to Earls Barton. He came to Canada 1980 and lived in Erin Mills until 1993 when he moved to Waterdown.

He did his apprenticeship at The Royal Air Established Bedford, and worked in the heavy maintenance hangar until 1974. Afterwards he worked for Brooklands aviation until 1976 when he went to Saudi Arabia to work on their Lightnings. In 1978 he worked at Luton airport and came to Canada 1980, In Canada his first job was at Fields aviation at Malton. He worked for Air Canada until 1983 at which point he joined McDonnell Douglas as an inspection foreman until 1993 when he started his own kitchen refinishing company.

He used to build rubber band free flight models when he was a boy. He joined the ATC when he was fifteen and got his glider certificate after completing 3 solo flights. His favorite aircraft is the English Lightning, and favorite model was his stick 40.



NOT IAN BROWN

What's Happenin' at BRCM

For an additional
\$4.95 we will
provide a receipt
that matches
what you told
your spouse you
paid.

Based on the survey results, the Board has decided to have 3 meetings this winter. The Library is still not open, so they have found an alternative site. St. Matthews Church, 126 Plains Road E., Burlington. Right across the street from Skycraft. The site has a large room with tables and chairs

They had to pick a different night from before. So meetings will be held on 3rd Tuesday of the month, 7:30-9:00. Dates for this year are: March 22, April 19, and May 24. Topics for April and May will be announced later.

The meetings must, of course go along with provincial guidelines, which means that:

- a) Vaccination status does not matter.
- b) Masks must be worn.
- c) Social distancing enforced.
- d) A contact list has to be created at each meeting, which will be destroyed after a few weeks.

Now that life is sort of back to normal, we've been thinking ahead to summer events. We have 4 events planned. We're getting into detailed planning for the first one; the rest are still preliminary.

Maidenfest May 14

Bring your new planes out, and we'll have some experts on hand to help with preflight, trim and buddy system. And if you're an expert (You know who you are) please get in touch with Ian Brown (see webpage) if you can help out.

Father's Day Fun Fly June 19

EDF Day July 17

Corn Roast Aug 27

Events are always scheduled for Saturday. If weather sucks, Sunday is an alternate.

AVIATION History



CLUE 1



While his father chats with a customer at the hardware store, a uniformed Jimmy Stewart sets up a date to go fishing, 1945. (Colorized by John Gulizia from America)

It's like deja vue all over again

Yogi Berra

The following pictures are from a collection held by the late Lawrence Cragg, found by Tom Gwinnett while cleaning our Lawrence's RC equipment. Tom was kind enough to ask me to be keeper of this history, which I will pass on to the next Skywords Editor when the time comes. The captions are Lawrence's and were with the prints.

The idiots at the new
year's day frost fly 01
January 1999



The Ultra Sport's
debut

Tony ready to take me
home from hospital after
the Ultra Sport bit me

