



Keep in Touch!

CAAA E-mail: caaa@telusplanet.net
Home Page: www.CanadianAerialApplicators.com
Phone: 1-780-413-0078
Fax: 1-780-413-0076

Inside:

- Danger of Fatigue
- Take your Choice. Pests or Pesticides?
- Product Qualified Companies & Pilots

NEW HORIZONS

VOL. 14 NO. 3

NATIONAL NEWSLETTER

JULY 2008

PRESIDENT'S REPORT

By Fran de Kock

As I write this report, the main complaint has been the cost of inputs. The inputs cost have increased substantially starting with fuel and fertilizer. Hopefully the increase in commodity prices will more than offset the input increases.

We as operators will have to give serious consideration to our cost increases when setting our application rates for the 2008 season. Fuel has increased substantially since last season, where will it be by August?

The 2008 season has the potential to be a good one for aerial applicators. Commodity prices and pest forecasts are major factors in this optimistic outlook. I have been told by growers and fellow applicators alike that this will be a big season. When you have been involved in aerial application for a long time one thing you learn is that a lot of unexpected things can happen to change the season in a hurry. One thing that appears to be solid for this year is the commodity prices.

There are a number of operators that have increased or updated their equipment. It is very important to complete a thorough training program when advancing to larger and more complex aircraft. One thing that never ceases to amaze me is the complaining about turbine transition courses. A small turbine powered spray craft costs between 600,000 and 700,000 dollars. The cost of a turbine transition course ranges from 3500 to 7500 dollars; a small percentage of the total cost of a turbine spray craft. Not only is transition training required for a Caravan or PC12

it is an annual or biannual requirement thereafter. Why is it so difficult for us in the aerial application industry to accept training?

The spring season seems to be the most hectic part of the year for me. There are so many things to do and not enough time in a day to do them. There are always issues to deal with involving the CAAA. Some of them are simple, some complicated and some controversial but they all require attention. The everyday routine of running a business that is involved in maintenance, training, aerial application and operating an airport demands a lot of time and energy.

The part of my days that I enjoy the most in the spring is the agraining. There is nothing more enjoyable than teaching something you enjoy doing to someone who wants to learn. The hours that I put in the GA200 beside a new agpilot watching his or her skills develop is very rewarding for me. I think the agraining has improved my own skills and attitude towards what I do. It has definitely made me more conscious of the example that I set throughout the season. As experienced pilots in a larger company always set a good example for the junior pilots you work with. Remember that you are always being watched by the junior pilots.

Remember FLY SAFE and have a profitable season.

PROVINCIAL REPORTS

ALBERTA Tom Kinniburgh

Spring rains, you gotta love em. The monsoon season is over in southern Alberta with some areas getting over 3 inches of rain in 1 week.

We started flying a little later than in the last 2 seasons but as long as we are spraying I'm happy. {So is my banker}

2008 must be the year of the audit as we just went through a transport Canada base audit followed by a surprise AWSA warehouse audit PMRA visited me in July so what's left , O, H, and S, I guess

Fly safe this season, get rest when you need it or just walk away from your aircraft for a while when you have to

A friend of mine sent me the following story about radial engines. I hope you enjoy it.

DEDICATED TO ALL THOSE WHO FLEW BEHIND ROUND ENGINES

I loved it when they coughed, gasped for more air, huge clouds of white smoke billowed, and when it was through with the "start ritual", there was a loud, but smooth running machine that sounded like a fine tuned aircraft engine ready for duty.....I didn't whine like a snivelling woman, it was a real engine.....

It was all in the mixture control, and knowing when to go to full rich....

Please read on.....

We gotta get rid of those turbines; they're ruining aviation and our hearing...

A turbine is too simple minded, it has no mystery. The air travels through it in a straight line and doesn't pick up any of the pungent fragrance of engine oil or pilot sweat.

Anybody can start a turbine. You just need to move a switch from "OFF" to "START" and then remember to move it back to "ON" after a while. My PC is harder to start.

Cranking a round engine requires skill, finesse and style. You have to seduce it into starting. It's like waking up a beautiful and classy mistress. Treat her right and you're in for a thrill.

Abuse her and you'll regret it!!!!

On some planes, the pilots aren't even allowed to start the engine...

Turbines start by whining for a while, and then give a lady-like poof and start whining a little louder.

Round engines give a satisfying rattle-rattle, click-click, BANG, more rattles, another BANG, a big macho explosion or two, more clicks, a lot more smoke and finally a serious low pitched roar.

We like that. It's a GUY thing...

When you start a round engine, your mind is engaged and you can concentrate on the flight ahead. Starting a turbine is like flicking on a ceiling fan: Useful, but hardly exciting.

When you have started a round engine successfully your Crew Chief looks up at you like he'd let you kiss his girl, too!

Turbines don't break or catch fire often enough, which leads to aircrew boredom, complacency and inattention. A round engine at speed looks and sounds like it's going to blow any minute. This helps concentrate the mind!

Turbines don't have enough control levers or gauges to keep a pilot's attention. There's nothing to fiddle with during long flights.

Turbines smell like a Boy Scout camp full of Coleman Lamps.

Round engines smell like God intended machines to smell.

Pass this on to an old Round Engine guy (or his son, or anyone who flew them) in remembrance of that "Greatest Generation."

SASKATCHEWAN Joe Varjassy

As the end of May is only two days away (kind of rhymes) we are all to soon to get back into the business of aerial application. Hopefully all the administrative duties, insurance, licensing etc. etc. are all done and we can get down to the flying part and generating cash flow to pay for our start up expenses.

In southern Saskatchewan we have had a colder and drier than normal spring with an abundance of moisture in the north. The majority of the seeding is done but there are still a few farmers out there trying to get completed. In the past few days we have had some frost damage, but to what extent are not yet known. Manpower seems to be a big issue for most business including agriculture, here in the aerial application business we are all too aware of the pilot shortage, and hopefully this will change in the years to come.

Our new website is up and running at WWW.SAAA.ca I encourage everyone to log on, have a look and give us your comments.

On Monday May 26/08 I attended a press conference at Esterhazy where highways minister Honourable D. Wayne Elhard announced a matching grant for their airport improvement. The highways department will be assisting a number of southern Saskatchewan airports in the near future.

That pretty well wraps up the Saskatchewan report, have a safe season, bye for now.



Take your Choice. Pests or Pesticides?

Written by Alan Caruba, Canada Free Press

I have never been able to understand why people have no problem taking drugs for medicinal purposes—frequently never reading the listing of side effects or the warning that taking too much might kill them, but seem to have fits every time some nitwit self-appointed think tank announces that a pesticide poses a threat to all life on Earth.

This is how one of the greatest pesticides ever invented, DDT, got banned. It had nothing to do with its beneficial effect, i.e., saving millions of lives from malaria and other mosquito-borne diseases, and everything to do with the fabricated “science” put forth by Rachel Carlson in her book, “Silent Spring.”

Since 1970, the U.S. Environmental Protection Agency has done more to remove from use some of the best pesticides ever invented for the protection of property from termites to one all-purpose pesticide that was applied with nothing more toxic than water!

So, naturally, the July 31 announcement by the Center for Public Integrity that they had discovered a vast conspiracy to keep everyone from finding out that pyrethrins and pyrethroids were responsible for 1,030 deaths out of more than 300,000,000 Americans in 2007 must be analyzed as virtually worthlessness.

Countless people die every year from drowning, bicycle accidents, and dozens of other commonplace causes, but the Center is not interested in comparisons.

Nor is the Center interested in delving into whether the deaths attributed to the use of pyrethrins and pyrethroids involved people with serious asthma or other lung afflictions. Some rare allergies might well have triggered a lethal response, but just as surely as people allergic to peanuts can die from ingesting them, a particular and unusual susceptibility to some kinds of chemicals will account for some deaths.

It must also be noted that some people use pesticides for the purpose of committing suicide. Among the deaths noted by the Center, they too are unidentified.

The usual unidentified implications of those deaths are further magnified by the Center’s statement that “scientists are still unsure of the long-term neurotoxicity of pyrethrins and pyrethroids, particularly among children and those susceptible to allergies.” When your intent is to frighten people, referencing “children” is always a component. And, of course, this is an entirely speculative observation.

In point of fact, pyrethrins (a natural compound derived from an extract of chrysanthemum flowers) or pyrethroids (man-made synthetic compounds), are among the most benign pesticides that either pest management professionals or the public can use. They are an irritant to most insect pests and, while it may not kill them, it will cause them to avoid areas where it is applied. They affect the nervous system of insects.

A December 1998 study released by the National Pesticide Telecommunications Network (Oregon State University) notes that, “Scientists have no data from work-related, accidental poisonings, or epidemiological studies that indicate whether or not pyrethrins are likely to cause cancer in humans.” The same holds true for data related to reproductive problems or birth defects. There is no mention of any deaths attributed to them.

The potential of dying as the result of exposure to pyrethrins or pyrethroids is very small. Thus, deaths attributed to these pesticides are circumstantial at best. It is so small even the Center acknowledges that, “the EPA does not require product warning labels cautioning consumers with allergies to the dangers associated with pyrethrins and pyrethroids products.” The FDA requires label

notification on shampoos that contain them. If people were dying from shampooing, that would be news!

In order to come up with its announcement, the Center had to make “more than a dozen Freedom of Information Act requests” before “crunching the data.”

“Crunching” indeed! You probably have better odds of being killed by a bolt of lightning than from any threat posed by these particular pesticides.

One of the earliest “threats” that the environmental movement cut its teeth upon were pesticides. Now that “global warming” is being discredited on a daily basis, we will probably see more of these pusillanimous announcements as they return to pesticides as a go-to scare tactic.

In the end, you have a choice between the diseases insect and rodent pests transmit and the vast amount of property damage they inflict annually or the proper, careful use of pesticides of every description. All must be registered with the Environmental Protection Agency and that process usually costs several millions of dollars.

As for the Center for Public Integrity (what does that mean?) the watchword is caveat emptor, buyer beware.

Riddle:

I went into the woods
and got it. I sat down to
seek it. I brought it home
with me because I couldn't
find it. What is it?

answer on page 10

CAAA Members Services

CAAA Bulletin

The CAAA email bulletin is circulated monthly to Corporate, Individual and Allied members to keep members current regarding time-sensitive and urgent material.

CAAA New Horizons Newsletter

Distributed quarterly, the newsletter contains informative articles, industry perspectives, reminders plus classified advertising.

CAAA Annual Membership Directory

The CAAA Directory is produced annually in the spring and contains key contact and company information.

CAAA Annual Wall Planner

The CAAA Wall Planner (year at a glance) contains the important dates to remember.

CAAA Website

The CAAA website is an excellent tool to provide information to assist current and potential members. Check it out at www.CanadianAerialApplicators.com.

CAAA Annual Conference & Tradeshow

The CAAA Annual Conference & Tradeshow is an educational forum providing members with information on safety, new product developments, research, governmental regulations and industry trends. License re-certification credits are also available for attendees.

CAP Clinics

The CAAA provides association supported CAP Clinics at

numerous locations across the prairies.

Business Survey

The Business Survey provides valuable industry specific information to assist participants with on-going management decisions.

Self-Audit

The Self-Audit program provides operators with a checklist of regulatory requirements and is designed to assist with spring start up.

Classified Advertising

Available to all members in the New Horizons newsletter and on the CAAA website.

Pilot Registry Program

Assists operators to locate a pilot and pilots to find viable permanent and temporary employment.

CAIR & Misapplication Insurance

CAAA membership provides applicators an opportunity to apply for both CAIR Hull Insurance and CAAA Misapplication Insurance through provincial drift insurance programs.

Pilot Registry Program

Assists operators to locate a pilot and pilots to find viable permanent and temporary employment.

Educational Presentation Kits

Designed for producer groups, manufacturers and the general public.



QBAS

Queen Bee Air Specialties, Inc.

136 N. Yellowstone Hwy • Rigby, Idaho 83442

Ph: (208) 745-7654 • Fax: (208) 745-6672

Aircraft Sales & Parts • 800-736-7654

www.queenbeeair.com

Product Qualified Companies and Pilots

Remember if you plan to spray Roundup/Vantage or Touchdown by air you must be a Product Qualified Pilot working for a Product Qualified Company. Following is the criteria required:

Criteria to become a qualified pilot are:

- **Current Provincial License**
- **Roundup Specific Training** - including passing the exam
- **Flight Times** – a pilot must have completed 250 hours of aerial application flight time with 100 hours occurring in the past two years. The CAAA office must have flight time verification on file for you to qualify. If a pilot does not meet these qualifications, he can apply as an apprentice. An apprentice must be listed by a Roundup, Vantage and/or Touchdown qualified pilot on his Flight Time Waiver form. This requires the Roundup, Vantage and/or Touchdown qualified pilot to have direct daily supervision of the apprentice. Flight Time Waiver forms are available from the CAAA office.

Criteria to become a qualified company are:

- **Calibration Clinic** – Aircraft must have been calibrated within the last 20 months to meet the minimum acceptable standard.
- **Drift Insurance** – members not covered by either the Wild Rose Protective Fund, the Prairie Protective Fund or the Keystone Aerial Applicators Protective Fund must provide annual proof of a minimum of \$25,000.00 drift insurance coverage for each aircraft.
- **Provincial Service Registration/License** – Alberta and Saskatchewan only.

A list of all qualified pilots and companies is maintained and produced for the provincial regulators by the CAAA. Check the CAAA website for a list of qualified pilots and companies to apply Roundup, Vantage and/or Touchdown in 2008. Call the CAAA at 780-413-0078 if you have any questions.

CAAA Mentorship Program

The CAAA's Mentorship Program is available to provide a confidential source of advice and mentoring to all new applicators. The CAAA has gathered names of mentors who have agreed to confidentially dialogue with applicators throughout the season. Below is a list of applicators who have agreed to participate in the program, with their contact information. They are available to speak with any new applicator on a totally confidential basis. Contact anyone one of them if you have questions or need advice during the season:

Jon Bagley	Bus: 204-763-8998	Cell: 204-729-7723
Johnny Bestland	Bus: 204-736-4793	Cell: 204-792-2274
Matt Bestland	Bus: 204-736-2476	Cell: 204-771-1980
Allan Denesowych	Bus: 306-786-7007	
Fran de Kock	Bus: 306-445-3099	Cell: 306-441-0547
Bruce Gair	Bus: 780-352-7833	Cell: 780-352-1278
Brent Lange	Bus: 780-352-7833	Cell: 780-361-8831
Lorin Rubbert	Bus: 306-489-4811	Cell: 306-483-7815
Clarion Seib	Bus: 306-786-6072	Cell: 306-621-7171
Wayne Silzer	Bus: 306-598-2033	Cell: 306-231-7109

Get confidential advice you need to help you make the safest decisions.

CAIR Contact Information

Keep this information in your CAIR file to assist you during the season. CAIR inquires should be directed as follows:

For questions regarding CAIR safety seminar, CAIR videos, meeting information or general inquires contact:

CAIR
P.O. Box 21106
Edmonton, AB T6R 2V4
Phone: 780-413-0016
Fax: 780-413-0076
Email: caaa@telusplanet.net

For questions regarding insurance coverage, applications and claims contact:

George Esau
Oldfield Kirby Esau, Inc.
P.O. Box 699
Winnipeg, MB R3C 2L2
Phone: 204-943-1441
Fax: 204-957-5561
Email: gpesau@oldfieldkirby.com

For questions regarding financial statements, taxes and payments contact:

Jim Peters
1002 Warsaw Avenue
Winnipeg, MB R3M 1E4



PORTAGE AIRCRAFT MAINTENANCE LTD.

- New 6400 sq. ft. Spacious Shop
- Engine installation – Top End Overhauls
- Large range of parts for all aircraft
- N/S paved runway – tie downs – fuel
- Importation of Aircraft
- All your maintenance needs

For more information or to book your aircraft call Mark Pazdzior or Jonathan Bodie
(204) 857-4151
Located 7 miles E. and 1 mile N. of Portage, MB

Dollars & Sense of Aerial Spraying Brochures Available through the CAAA

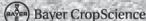
2004 completed Manitoba field trials, illustrated aerial application yields are as good as, or better, than ground application on canola, wheat beans and potatoes. This is the second trial in ten years that illustrated yields were better overall with aerial application. The data from the trials has been compiled and published in a brochure for use by aerial applicators. The brochure provides applicators with an excellent marketing tool to promote their services to producers. The brochure is available through the CAAA office at \$1.00 per copy (100 brochure minimum). The trials were independently conducted by AXYS Agronomics and supported by Manitoba Aerial Applicators Association, BASF Canada Inc., Arty's Air Service, Bestland Agro, Jonair (1988) Ltd., Morse Bros., Roland Air Spray, and Westman Aerial Spraying Ltd. For more information contact the CAAA at 780-413-0078.



Aerial application made easy.

PROLINE

Proline® makes superior Sclerotinia disease control part of the flight plan. With Proline, you help prevent disease infection before it starts. Yield results climb 10% on average over market leading canola fungicides and 18% over untreated checks. For high flying results in canola, use Proline.

 Bayer CropScience

bayercropscience.ca or 1 888-283-6847

Always read and follow label directions. Proline® is a registered trademark of Bayer. Bayer CropScience is a member of CropLife Canada.

05/08-8117-02

Calendar of Events

SAAA AGM – 2008

November 12 - 14, 2008
Regina, Saskatchewan

AAAA AGM – 2008

November 17 - 19, 2008
Red Deer Lodge, Red Deer, Alberta

NAAA Conference – 2008

December 8 – 11, 2008
Las Vegas, Nevada

CAAA AGM – 2009

February 26 - 28, 2009
Delta Kananaskis Lodge
Kananaskis, Alberta



Kananaskis

With tales of a ghost town, travelling Stoney Indians, a former POW camp and the long-forgotten tunnels of a coal mine, Alberta's Kananaskis Country has a storied heritage to rival its many spectacular outdoor and recreational pursuits.

Travel one hour west of Calgary, along Highway 40, to Kananaskis Village and you will find Delta Lodge at Kananaskis, "Alberta's Mountain Lodge and Spa." Prestigious enough to attract the G8 world leaders and the CAAA conference hotel.

The 4,000 square kilometres of Kananaskis Country, one of eight provincial parks and wildlife areas, including Banff and Lake Louise, is an outdoor playground for all ages. Cross-country ski through fresh powder or downhill ski over the moguls at Nakiska, site of the 1988 Olympic Alpine events. The base of Nakiska Ski Resort is 5 minutes from the conference hotel. The ski area is excellent

for families with a variety of skiing levels. Even the experts will find challenging runs as the national ski teams from Canada, Germany, Norway and Sweden train at Nakiska.

Mark your calendars for the 2009 CAAA Annual General Meeting in Kananaskis. Come and join us in this wonderful winter wonderland with skiing and all winter sports at your doorstep.

2008 CAAA Annual Conference & Trade Show February 26 – February 28, 2009 Delta Lodge at Kananaskis Kananaskis, Alberta

Thursday, February 26, 2009

12:00 p.m.

Opening Lunch with Speaker
CAIR Safety Seminar (2 credits)
Exhibits Open/reception
Icebreaker – BBQ & Sleigh Rides at Boundary Ranch
Hospitality Suite

Friday, February 27, 2009

CAAA Annual General Meeting
Exhibits Open
Awards Luncheon
Exhibit Open
Hosted Reception
Banquet & Auction
Hospitality Suite

Saturday, February 28, 2009

Credit Session (1 credit)
Coffee Break
CAIR Annual General Meeting
Coffee Break
Credit Session (1 credit)

Mark your calendars now to attend the 2009 CAAA Convention on February 26-28, 2009 at the Delta Lodge at Kananaskis.

Call the Delta Lodge at Kananaskis at (403) 591-7711 and indicate you are with the CAAA before January 26, 2009 to receive the conference room rate of \$115.00.

Hemisphere GPS Introduces the Air IntelliFlow(R) Dual Rate(TM) System for Aerial Application

Hemisphere GPS announced today that it has released a new product for the aerial application market that will greatly improve the efficiency of applications and the productivity of pilots. The Air IntelliFlow Dual Rate system is the latest addition to the Hemisphere GPS precision aerial product line which is targeted at a broad range of applications, including crop spraying, pest control, forestry, and fire management. Built on the market-proven and reliable Hemisphere GPS Air

IntelliFlow automatic flow controller, the unique design of the Air IntelliFlow Dual Rate controller improves the efficiency and effectiveness of aerial application by independently managing two separate spray systems on one aircraft.

“Our new Air IntelliFlow Dual Rate system represents the evolution of our product line to meet the growing sophistication and demands of the aerial application market,” said Chad Lind, General Manager of Air Products for Hemisphere GPS. “Air IntelliFlow Dual Rate eliminates the limitations of single flow variable rate controllers, allowing our customers to be more productive and effective.”

“When using a traditional variable rate system, as I change the rate, the system simply releases more or less liquid, which creates droplets that may be too heavy or too light resulting in a less than perfect spray job,” stated Les Brown, pilot for Pay’s Air Service in New South Wales, Australia. “The Air IntelliFlow Dual Rate maintains an ideal droplet size, significantly improving the spray efficacy and minimizing its drift.”

Improving spray efficacy and controlling spray drift are the two most critical goals of any aerial application. The Air IntelliFlow Dual Rate achieves this by constantly maintaining a desired droplet size. It provides a solution for true variable rate spraying, and surpasses the performance of traditional variable rate systems. Using Air IntelliFlow Dual Rate, aerial applicators are able to control spray over a wider range of application rates.

On fields that require different rates for different areas in the same field, the operator can use a method often referred to as direct injection, applying a constant rate of spray while varying the concentration of chemical within the spray. The Air IntelliFlow Dual Rate system also enables aerial applicators to apply two different rates on the same swath to spray a field continually with one application and spot spray with another. All these features reduce trips between job sites and the pilot’s base in order to reload for different applications, thereby reducing costly and wasteful flight time.

The IntelliFlow Dual Rate system offers all the same valuable features of the original Hemisphere GPS Air IntelliFlow controller,

including a wide range of turbine and meter sizes, and the ability to pre-enter hopper input and boom output. When combined with the Hemisphere GPS Air M3(TM) featuring AirTrac(TM) software, pilots have the ability to fly and spray precise patterns using state of the art GPS guidance. Together, Air M3 and IntelliFlow Dual Rate will reduce input costs by minimizing skips and overlaps, reducing flight time, and maximizing the precision of the application. Hemisphere GPS will begin shipping IntelliFlow Dual Rate systems in August 2008. Current Hemisphere GPS IntelliFlow users can convert to the new Dual Rate system by purchasing an IntelliFlow Dual Rate system upgrade kit.

Aerial application made easy.

Follicur®

Protecting against disease in wheat is easy with Follicur®. No fungicide can raise yield and protect quality like Follicur. That's because Follicur provides a level of complete disease protection unmatched by anything in the market - helping growers increase yields by an average of over 20%.

Bayer CropScience

bayercropscience.ca or 1 888-283-6847

Always read and follow label directions. Follicur® is a registered trademark of Bayer. Bayer CropScience is a member of CropLife Canada.

05/08-8117-01

The Danger of Fatigue

Fatigue is closely interrelated to other problems in that it can be a symptom of them, or it can be the cause. The most obvious cause of fatigue would be a lack of sleep, but other factors would include stress, anxiety and poor health. It can also be a cause of these problems. Furthermore, fatigue can be the symptom of other problems such as hypoxia and dehydration.

Symptoms of fatigue include a feeling of indifference to one's performance, increased reaction time, a decreased ability to concentrate on multiple tasks, fixation, short-term memory loss, impaired judgment, impaired decision-making ability, distractibility, sloppy flying skills, reduced visual perception, loss of initiative, personality changes and depression.

Quality Sleep

To understand the problem of inadequate sleep, we should understand what sleep is. There are four stages of sleep starting with about 10 minutes of REM (rapid eye movement) sleep where the mind is active (dreaming) and the smaller muscles twitch. During the next three stages the mind and body slow down. After 45-70 minutes, we return to REM. People go through this cycle several times through the night and an interruption of any stage (i.e., the hotel maid waking you up to see if you need the room cleaned, or a phone call from dispatch to tell you that they have received your fax) will render that whole cycle ineffectual.

One major cause of sleep deprivation is a disruption of our internal light/dark cycle, called circadian rhythms. Circadian rhythms are the biological clock existing in our brains since prehistoric times, which tell us that we should work when it is light (day) and sleep when it is dark (night). The word comes from the Latin "circa" (about), and "dies" (day). Circadian changes make a person try to sleep when their mind is wide-awake, and they force them to remain awake when their mind is screaming to go to bed. Long schedules and changes in circadian rhythms are among the most common causes of fatigue faced by pilots, mainly because there is little that can be done to change them. We are all subject

to these factors and the best defense is to limit their effects by controlling the fatiguing factors that we can.

Diet And Nutrition

For example, any pilot from a brand-new student to the about-to-retire captain will tell you that the beverage of choice among pilots is coffee. However, while coffee is a stimulant and causes a temporarily increased level of alertness, fatigue is symptomatic of its withdrawal. Furthermore, coffee is a diuretic, which causes the body to discharge more fluid than it is taking in, resulting in dehydration, which in turn can cause fatigue.

While there can be no argument against being in good physical shape, a strenuous workout can also cause dehydration and should be completed with ample time for rehydration. Also, environmental conditions can cause dehydration. Obviously, the 130-degree ramp at Phoenix is a place where dehydration is of concern, but what about the 72-degree cockpit in which we work? Worry about it, too. The average humidity there is low and can cause a dramatic increase in fluid loss.

Another factor is nutritional intake. The diet of a pilot can at times be horrendous. What can you do when you are sitting in an FBO, ten miles from the nearest restaurant, and have not eaten since 5:00 a.m.? You may have slept well the night before and the flight may have been easy and relaxing; but you are tired and weak and do not know why. You pull out a few bucks and feed them to the vending machine, hoping that it might relinquish its firm grasp on that bag of Ruffles and the Snickers bar. Then you buy a Coke with the change. Very quickly you notice that your energy is returning. Even your mood improves. It turns out that you may have been hypoglycemic; your blood sugar was too low. While the nutritional value of that kind of food is objectionable, it does have a redeeming quality in that it can stave off or reverse the effects of hypoglycemia, which can be a cause of fatigue. It should be noted that a healthy diet is much better in the long term and may be had by packing your own meal, receiving catered meals from the company, or getting a healthy meal at the airport diner.

Illness And Environment

If you're sick, don't fly. It is an obvious statement, but many people fly when they are sick anyway. Many companies make it financially disadvantageous for pilots to report their malady. Some pilots think that they are invincible and that they perform better than most even when afflicted with a cold or flu. Others know that they are impaired by an illness so they compensate with antihistamines. Antihistamines help by alleviating the symptoms of illness but by their nature they also increase fatigue. Regardless, these people are doing their fellow employees a disfavor by exposing them to their illness and further increasing the possibility of an operational error due to fatigue. They may be involved in an accident, or maybe not, but they can unwittingly be a contributing cause to one.

Other environmental concerns include noise and vibration, hypoxia, extreme temperatures, and flickering light. Many less-experienced pilots will go out and enjoy an exciting day off at the cost of their vitally required rest. Some companies stretch their employees' rest requirements to the legal limit of flight and duty time restrictions to maximize productivity.

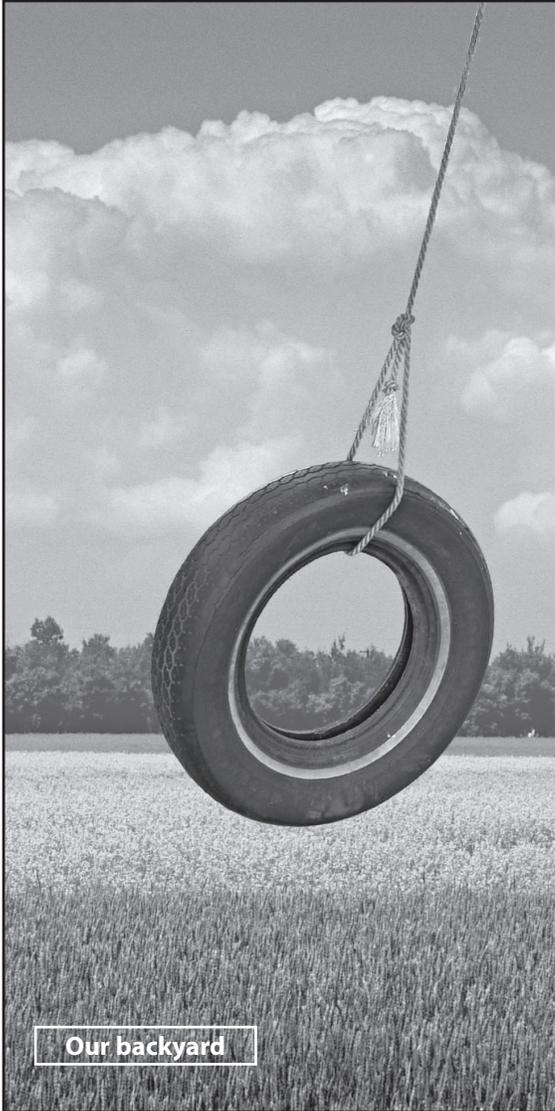
...And Solutions

Fatigue in pilots can be reduced or eliminated with simple and practical steps on the part of the operator and the pilot.

The operators need to recognize that the cost of fatigue and the errors that result are many times higher than the cost of ensuring adequate rest for their pilots. Seventy percent of the accidents in aviation are due to pilot error, and fatigue is a major cause of those errors. If the operator took measures to reduce fatigue, they would reduce the chances of errors due to fatigue.

Finally, and arguably most importantly, fatigue can be prevented by individuals taking preemptive measures. Pilots take great pride

Continued on page 10



Our backyard

It's a place where customers are neighbours, employees are friends and the land will support future generations. It's a place where we've provided innovative products and solutions to growers from pre-plant to post harvest for over 100 years. It's a place where we're proud to be your partner for growth.



1 888-283-6847 www.bayercropscience.ca

03/08-7809

Riddle:

Answer: A splinter

Continued from page 9

in their skills and abilities, yet they let their performance degrade needlessly due to fatigue. It is in their hands to take the necessary steps to remain safe and alert, even when their employers are allowing them to work irrational and dangerous schedules. Planning to get enough sleep before work is the most obvious step. Using earplugs and eye masks can help in this endeavor. Another step would be to eat properly. Everyone should exercise often, but remember to do so daily. This will make the pilot healthier and more alert. Pilots can stay hydrated by drinking plenty of water and avoid coffee, sodas and alcohol. They can wear noise-reducing headsets if the cockpit is loud. Finally, they must stay home when they are ill, for their own sake and for their fellow workers.

Fatigue is often the cause of pilot error and it is therefore often the vital link in the chain of events leading to an accident. It is often the reason that pilots don't make the right decisions or fly as well as they can. If a reduction in fatigue yielded an increase in pilots' decision-making abilities and performance, then there would obviously be a decrease in pilot error and the accidents that sometimes ensue. Not all errors result in accidents, but if everyone in the aerial application business took the appropriate steps to combat fatigue, it is likely that pilot error due to fatigue, therefore accidents due to pilot error, would drop significantly.



Fuel Theft Warning

The rapidly rising cost of fuel has led to worldwide reports of the theft of aviation fuels. A recent issue of AVweb's online newsletter reports that the pilot of a commercial aircraft in New Zealand noticed during the preflight inspection that the fuel caps were improperly installed and fuel residue was found on the ground. It is important that this type of activity be discovered before an aircraft's flight safety is jeopardized.

Keep this issue in mind when you perform your preflight inspection – especially if you have left your aircraft tied outside overnight. Consider the installation of locking gas caps as a deterrent but always visually check the fuel cap security and the fuel level before flight. Even if the tanks were topped-off the night before, make sure that they are still full before leaving the ground.

Diamond

Bayer CropScience Canada Co.

Gold

BASF Canada, Inc.

Syngenta Crop Protection Canada, Inc.

Silver

Air Tractor, Inc.

Dow AgroSciences Canada Inc.

DuPont Canada Inc.

Forest Protection Ltd.

Queen Bee Air Specialties Inc.

Univar Canada Ltd.

Bronze

44-AV-FUEL.COM

AAAA

ABJ Agri Products

Aerial Spray & Charter Ltd.

Aero-Recip (Canada) Ltd.

Ag Air Update

Ag Chem Equipment

Aglasers, LLC

AgResource

AG-NAV Inc.

Alexander Keith's Nova Scotia Brewery

Atlantic Avionics Inc.

Battlefords Airspray

Brandon Flying Club

C.P. Products

Can Pro Gator Centre

Canadian Helicopters Ltd.

Canadian Propeller Ltd.

Cheminova Canada Inc.

Conair Group Inc.

Covington Aircraft

DynaNav Systems, Inc.

ECC

Bronze

Engage Agro

Flight Fuels, Inc.

Focus Industries Inc.

Goulet Aircraft Supply Ltd.

Hemisphere Air

Hope Aero Propeller & Components

JD Irving

Jeffries Airworks Co. Inc.

Johnston Aircraft Service, Inc.

Keller Equipment Supply Ltd.

Kelsen Agritech Inc.

Lancaster Aviation Fuels

Lane Aviation, Inc.

Leading Edge Aviation Ltd.

Leavens Aviation

MAAA

ManageWise, Inc.

Marsh Canada Limited

Micronair Sales & Service Inc.

Midwest Avionics

Monsanto Canada, Inc.

Murray's Aircraft

NEXUS Ag

Bronze

Nufarm Agriculture

Oldfield Kirby Esau, Inc.

Portage Aircraft Maintenance Ltd.

Prairie Aerial Applicators Ltd.

Pratt & Whitney Canada Inc.

PropWorks Propeller Systems Inc.

S.I.L. Industries

SAAA

Sky Tractor Supply

Specialized Spray Systems

Tennessee Aircraft Company

Thabet Aeroplus

TRACE Engines LP

United Agri Products Canada Inc.

West Wind Airspray Ltd.

Western Aerial Applications Ltd.

Western Ag Air Ltd.

Wetaskiwin Aerial Applicators Ltd.

Wetaskiwin Motor Sports

Woodlawn Instruments Ltd.

Yara Canada

Yorkton Aircraft Service Ltd.

*Special thanks
to our valued 2008 Partners*



CLASSIFIED ADS



AIRCRAFT

1975 Tuck, 3300 total time, 1100 engine time. Freshly painted needs prop. Contact Gerald @ **204-955-9544**.

1951 Cessna 170A C-FPPQ, 3245 hrs TTSN, 1429 hrs SMOH, 166 hrs STOH (all cylinders), C185 Gear & Gear Legs, Solid axles, Scott Tail Wheel, Cleveland Brakes, complete winter kit, insulated Cowl cover, slick mags, quick drain oil valve, 4 place intercom, owned for last 12 years, always hangared, paint 9.0, interior 8.0, VFR aircraft, VHF/VOR Narco MK, ADF Cessna 300. Aircraft is located in Brandon, MB. \$51,000. Contact Todd Lewis @ **(204) 726-8228**.

1973 Cessna 188B Ag Wagon, 2850 Hrs TTAF, 912 Hrs, engine TTSM, Satlock lilestar GPS equipped, VHF and FM radios, Stainless steel booms C/W air driven pump, New paint, no damage history. Very clean airplane, ready to fly away. Currently located at Stony Plain, Alberta. Please contact: Roland Blackburn, **(780) 939-2454 Home** or **(780) 910-8310 Cell**.

PARTS, EQUIPMENT AND SERVICES

1988 International Fuel Truck. 5 compartments, 2 pumps, 306 standard. Safetied and Certified, Call John **204-857-4151**.

1992 Volvo, single axle, 600 gal.fuel storage, 300 gal Jet fuel, 300 gal. LL 100, 2000 gal. water tank and a 125 gal. mix tank. Honda 3" pump. Call John **204-857-4151**.

Hartzell Prop (3 blade) for Cessna 185, 400 hrs. snow. Call **204-362-0406**

1975 Thrush, 12,000 hours total time; 200 hours SMOH. Assorted Thrush parts, tail rudder, assorted Air Tractor 401 parts; firewall forward parts, etc. Contact Ken Kane at **204-867-3147** or email at **kenkane@mts.net**

We have converted our AT401B's to Walter Turbine engines and therefore have for sale the following parts: Propellers- 2 and 3 blade Hydromatic, exhaust parts, Firewall forward parts, some instruments. Please contact Ken Kane at **204-867-3147** or e-mail at **kenkane@mts.net**.

Ag aircraft parts, services all lines for 56 years. Mid-Continent Aircraft Corp. Hayti, MO 63851. **1-800-325-0885**.

Parts for Sale: Assortment of parts for S2R Thrush, Transland spreader new, stainless steel spray valve, CP check valves, plus numerous other parts. Call Joe at **306-738-2024**, email: **javandebv@hotmail.com**

AG-NAV 2, still the Ultimate GPS. Even though the price has been consistently dropping, with new software upgrades (at no charge to current owners!) the amazing agricultural capabilities of this compact GPS continue to expand. With Fire Nav, you can now have real time moving map fire fighting data, including bird dogs, air tankers and drop locations! AG-NAV's customer support is still unbeatable. Call **Lloyd at West Central Air at 306-882-3830**, or **AG NAV at 1-888-66-AGNAV**.

AVIATION FUEL TRUCK, Tank Size 3940 litres last used in Aug. 2005 by Field Aviation. Truck, pumps and meters in good working order. \$3,500.00. Call **Jonair, 204-857-4151**.

TWO PT6-67AG Engines For Sale. Low time & ready to go. Bob Wiplinger, MN/ **(1-888) WIPAIRE** or **wip@wipaire.com**

802 AIR TRACTOR, 5700 Hrs TT, Aircraft just O/H with new wing spars, 380 gal tanks, lightning kit, short cord ailerons, Horner wing tips, finlets, side thrust mount and seaplane kit. Low time -67 Engine- looks like new. Call Bob Wiplinger, MN **(1-888) WIPAIRE** or **wip@wipaire.com**

EMPLOYMENT OPPORTUNITIES

Looking for an Ag pilot to fly an Air Tractor 401B for the 2008 spray season. Our area promises a busy spray season. This can be a full time or part time position. Call John Bodie **204-857-4151**.

Aircraft Maintenance Engineers. Looking for (2) AME's M1 Radial engine and Agricultural experience would be an asset. Willing to travel away from Ontario base operation. Approx. 45 days a year. Salary commensurate with experience. Call Supermarine Aircraft Inc. phone: **519-633-8877**, fax: 519-633-5040, E-mail **superair@amtelecom.net**

Pilot required for Air Tractor 502 and for Cessna Ag Truck. Please submit resume to: Eagle Agro Service, Box 806, Neepawa, MB ROJ IHO or email to **eagleagro@inetlink.ca** or fax **204-476-5799**.

Pilots Wanted 2008. Qualified pilots with good safety record needed for positions in AT502B and AT802F beginning in the 2008 season. Pilots interested in a secure position flying in an agricultural and/or fire fighting position should call **204-763-8998** or email Jon at **jon@westmanaerial.com**.

Ag pilot needed for the 2008 season. Accident free and experience on piston Thrush or Air Tractor required. For more info contact Peter at West Wind Airspray by phone: **403-327-7426** or email at **westwind@shockware.com**



AgNav Guia is not just a full function compact moving map GPS with unbeatable customer support and free upgrades. You can add the AgNav integrated flow control system (on sale now!) which, just like the Guia, is very simple to install.

Check www.agnav.com to see

the optional software available - including FireNav, which offers real time moving map firefighting data, to the newest option, AgNav Connect, offering wireless data transfer between the cockpit and the office. Call Lloyd at West Central Air at 306-882-3830 or AgNav at 1-888-66AGNAV. Session details will be posted on the SERG-I website:

<http://www.sergreport.net/>