



Pikes Peak RC Club Newsletter
Volume 38 Number 01
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Pikes Peak Radio Control Club
AMA Club Number 179
P.O. Box 25604
Colorado Springs. Colorado 80936
Website: www.pprcflyer.net

Club President - Ben Woofter; Club Vice President - Mark "Gus" Grissom; Club Treasurer - Frank Tuxworth; Club Secretary - Rob Waggoner; Club Newsletter Editor - Keith Davis

Next Club Meeting:
(Tuesday) January 5th 2010
7:00 PM at the ELIC
(East Library Info Center)
Pikes Peak Public Library on Union



Happy New Year!



Last Month's Minutes . . .

(December)



Meeting Started: 7:00 pm
Meeting Adjourned: 8:10 pm
Members Attended: 35
Visitors: 0

Old Business:

1) Club President Jim Terry, reminded everyone about the upcoming Frozen Needle Valve Fun Fly on January 1st 2010. Breakfast will be served come sun, wind, rain, hail or snow!

New Business:

1) Club President Jim Terry, talked to the club members about the importance of having your airplanes properly marked with your identification. He received an email from an individual stating that he had found an RC airplane in his backyard and to call his phone number to identify the plane and claim it. Jim has the phone number.

2) Club member Gus Gustafson, talked about the upcoming Denver Air & Space Museum RC event on February 27th 2010. It is free for all participants that will bring an airplane. Any and all types of airplanes, helicopters and gliders are welcome. Contact Gus if you are interested in going.

3) Club member Bill Sanderman, talked about the Senior Pilots of Central Colorado Club. The club is for airplane enthusiasts and membership is free. See Bill for more details.

4) Club member Dan Brunson, stated that Jack Donahue is getting out of the RC airplane hobby and is selling everything. Talk to Dan if you are interested in the garage sale.

Airplane Funnies . . .

Submitted by: Oscar Flier



"For some strange reason, I always seem to get hungry when I fly this!"

2010 Jefco Auction

By Keith Davis



Just a reminder that the 2010 Jefco auction takes place February 5th, 6th and 7th at the Jefco fairgrounds in Denver. If it is RC airplane related, new or used, or not even in the best shape, you can buy or sell it! Pick a day or two and check it out!

And the New Vice President is . . .

By Keith Davis



The 35 club members that attended the December club meeting voted for the next Vice President. The candidates were Kevin Kinsel and Mark Grissom.

Mark "Gus" Grissom was voted in to be the club's 2010 Vice President and Ben Woofter will move up to the club president's position.



"Mark "Gus" Grissom, second from left, is the new VP. Congratulations to Ben and Gus!"

Jet Crash – Might have been prevented

By Larry K. Laughlin



A good friend of mine lost his beautifully scaled military jet this last weekend. His 2.4 GHz radio link was lost and the jet, with full fuel, had a mind of its own for 30 seconds or so, then it crashed hard. A total loss. We'll likely never know why it happened.

My friend, however, was given many, many warning signs prior to the jet's demise. He was starting to experience a little loss of control once in a while, combined with engine shut downs and other unexplained things. Instead of finding out what the problems were, he chose to ignore them and continue flying the airplane. Eventually, one of those unexplained things caused a complete radio failure and that was all she wrote.

The lesson learned here is that generally, your airplane will give you a few warnings before a catastrophic crash occurs (if you're lucky). If it's got a flutter issue, you'll sometimes hear it slightly,

perhaps in time to slow it down, land and check things out.

If the radio and/or batteries are weak, for whatever reason, you might catch it in time so as to land and see what's going on there! If the engine starts to stutter and carry on, you might be given enough time to get it around and put it back on the runway before you're left too low, too far away.

What ever you do though, don't ignore subtle warnings and just keep flying as if it will all clear up and go away. It probably won't and the end result may end up much more unpleasant than you wish. If you insist on flying your airplane, with problems occurring on every flight, go ahead and pack a large garbage bag within the fuselage. You'll need it later.

2010 Bob Burrows Award

By Keith Davis



Rob Waggoner was announced as the Bob Burrows Award recipient for 2010. Not only has Rob spent countless hours of updating, improving and maintaining the club website, he is always out at the airfield, willing to help anyone out that may need assistance.

So a well deserved congratulations goes out to Rob!



"Rob Waggoner (left) is happy to receive the 2010 Bob Burrows award from 2009 recipient Larry Laughlin."

Got a picture or an article that you want to share with the club? Get it to me by the 15th!

Lkdavis02@msn.com

Keith Davis – PPRCC Newsletter Editor

Surprise Announcement

By Keith Davis



Before out-going President Jim Terry handed the controls over to the in-coming President Ben Woofter, Jim announced that Dan Brunson has been given an honorary free life-time PPRCC membership for all that he has done for the club.



Dan Brunson (left) and club prez Jim Terry

Of course Dan was surprised, but he was honored to be recognized for all of his contributions and support to the club for the past 20 years.

“Dan being congratulated by Jim”

The decision to give Dan a free life-time membership was made by the EC members several weeks before the December meeting and Jim did the surprise announcement. Great job Dan!

PPRCC Digital Airplane Photo Event

By Keith Davis



The winners of the PPRCC digital airplane photo event was announced at the December meeting. First place went to Mike Evans, second place went Keith Davis and third place went to Chris Hoff.



“Mike, Keith and Chris with their new trophies”

Show & Tell

By Keith Davis



“Curtis Hughes describes his Pacific Aeroworks, electric powered Monocoup.”



“Duane Zinske explains his Cub to Husky modifications, inspired by last month’s Husky article.”



“Jim Terry has a Slimline 1/6 scale pilot figure that is highly detailed and for sale!”

It's Crashing Terrible... Oh the Humanity - Part One

By Michael J. Evans



The 40-size Cub lifted off with what appeared to be plenty of airspeed but soon began to pitch up about 45 degrees. With the Cub still at full power the pilot went through a couple of PIO type oscillations. On the third pitch up the Cub slowed, rolled to the right and subsequently completed a two turn, full power spin back down to the runway. The impact site looked like it had rained yellow. After we recovered the many, many pieces I felt like I was the RC equivalent of Hindenburg Disaster radio reporter Herbert Morrison; stunned, unable to help and lamenting about such a dramatic loss.

Here's the rub. I've witnessed this spin scenario before, actually a number of times before. The Cub pilot said he didn't have control of the plane. I've heard this before. In fact almost every time I've seen an RC plane spin to the ground the pilot said he was unable to control the plane; that it must have been a radio failure, a servo failure, an airframe failure or someone stepped on his frequency. I don't think so, at least not in most of the half dozen or so I've witnessed since joining the club 4 years ago.

Before I try to explain what is going on with spins, how to avoid, recognize and recover from them, I need to qualify my comments. I am not an engineer and quite unable to sustain a technical discussion of the aerodynamic forces at work in spins. My comments and advice will be very un-technical, based on common, accepted general aviation teaching and practice. Some of what I present will in fact be inaccurate when applied to particular aircraft; some modern jet fighters and over powered 3D planes for example. I believe that if a pilot understands what is happening aerodynamically during a spin then the pilot will be better prepared to avoid unintentional spins, be able to recognize a spin as such, be able to effectively recover to a normal flight attitude and perhaps go on to discover the joys of intentional aerobatic spins and recovery.

Here's one useful definition of a spin: an aggravated stall resulting in autorotation about the vertical axis of the plane. The stall part is the key, no stall no spin. It does seem counterintuitive that an aircraft's wing is stalled during a spin because of the 45 degrees or more of pitch down attitude. Remember, however, a wing can stall at almost any attitude or airspeed if the wing is allowed to exceed its critical angle of attack (AOA). For instance a snap roll is an accelerated stall, using rudder to initiate rotation,

resulting in something akin to a horizontal spin. The wing doesn't know where the ground is, it only knows the angle of oncoming air meeting it in relation to its own chord (AOA). In a spin, even with a steep pitch down attitude, the wing is stalled because the air oncoming to the wing is at too great an angle to flow over the wing smoothly and no lift is produced. The critical AOA is exceeded and the stall will continue until the angle of attack is reduced. When spinning in a full scale aircraft the indicated airspeed is quite low despite the false sensation of speed caused by the steep pitch down attitude and rapidly spinning terrain out the window.

Let's take a look at the chain of events that led to the Cub's unintentional spin. Our intrepid Cub pilot allowed the angle of attack to increase to the point that the wing exceeded its critical AOA and began to stall. Because of control input, coordination of controls, propeller slipstream and other factors both wings did not stall at the same time. The Cub's the right wing stalled first and began to drop. As the right wing fell its angle of attack increased and as the left wing rose its angle of attack decreased. This imbalance further aggravated the roll to the right and associated pitch down. The asymmetrical lift created an imbalance of wing drag by **increasing drag** on the right, descending wing and **decreasing drag** on the left or ascending wing. This imbalance of drag introduced a yaw force about the Cub's vertical axis resulting in an autorotation to the right. I believe that in an effort to save the plane the pilot was applying up elevator in an attempt to raise the nose and simultaneously using left aileron to level the plane, a classic but tragic reaction.

So what now? As long as the spin parameters, the stalled wing and associated rotational forces, are in effect nothing is going to change the situation. Any attempt to raise the nose with elevator will only aggravate the stall by increasing the wing's angle of attack. On most planes the application of anti-rotational aileron (left aileron in this case) will only increase the stall of the low wing. By applying left aileron in a right spin the right aileron is lowered thereby deepening the stall on that already descending wing while simultaneously increasing the right wing's drag. The opposite is happening with the high wing with its up aileron decreasing the wing's angle of attack thus lessening the drag on that wing. The result of anti-rotational aileron will most likely result in enhancing the stall spin rather than the desired effect of stopping the spin.

In Part 2 of "It's Crashing Terrible...Oh the Humanity" I will explore spin recovery using the **PARE** technique, spin prevention and the joys of spin practice.

All About Warbirds

By Keith Davis



Everyone has heard about the famous “Flying Tigers” led by Lieutenant General Claire Lee Chennault. Well, did you know that General Chennault had six sons and they all served in WWII and survived the war?



“P-40 Flying Tiger”

One of his sons, Lieutenant Colonel John “Jack” Chennault, was also a WWII aviator in charge of his own fighter squadron called the “Aleutian Tigers”.

The 343rd Fighter Group “Aleutian Tigers” was established in 1942 to combat the Japanese fighting in the Aleutian Islands, Alaska. LTC John Chennault became the first commander of the unit and his dad’s great success with the Flying Tigers in China inspired him to come up with the “Aleutian Tigers” nose art.



“P-40 Aleutian Tiger”

Despite the harsh weather and living conditions in the Aleutians, the Aleutian Tigers had good success flying P-38’s, P-39’s and P-40’s against the Japanese Zeros, Rufes, troops and shipping.

As the war continued and the Japanese abandoned the Alaskan campaign, the Aleutian Tigers were upgraded with P-47 Thunderbolts and P-51 Mustangs. When the war ended in 1945, the 343rd FG was disbanded in 1946 and John Chennault retired from the USAAF.

Even though the “Aleutian Tigers” did not get the fame and notoriety as did the “Flying Tigers”, they were the first to recover an intact Zero fighter and fully understand its strengths and weakness.

Test flying the captured Zero led to better tactics against the Zero and attributed to the Grumman Aircraft Company in building the F6F Hellcat designed specifically to take advantage of all of the Zero’s faults.



“One of the few remaining flyable P-40 Aleutian Tigers.”

Did You Know? The Flying Tigers got their “Shark Mouth” idea from the British. One day General Chennault was reading a 1941 “Life” magazine and saw a picture of a British Tomahawk with the shark mouth painted on the nose. So General Chennault did the same with his P-40s. The British painted the shark mouth on their P-40’s while fighting in North Africa against the Germans and Italians.

Did you Know? Brazil was the last nation to use the P-40 Warhawk as a frontline fighter. They retired the Warhawk from service in 1958.

So, What is this Airplane?

By Keith Davis



Clue: This WWII British bomber was built to replace the Avro Lancaster. But since the Lancaster was doing such a good job, only 3 of these bombers were built and the contract was cancelled.

Last month’s picture was a Douglas C-133 Cargomaster. Once again, Bill Sanderman and Paul McCoy know their airplanes!

Upcoming Events:

- Jan 1st 2010 (Friday) – PPRCC Frozen Needle Fly-in
- Jan 5th 2010 (Tuesday) – PPRCC meeting
- Feb 1st 2010 (Monday) – PPRCC meeting
- Feb 5th – 7th 2010 (Fri – Sun) Jefco RC Auction
- Feb 27th 2010 (Saturday) – Denver Air & Space Museum RC Display
- Mar 1st 2010 (Monday) – PPRCC meeting

