

President: Gary Fitch 716-676-2498
V. President: Walt Hibbard 585-968-0027
Treasurer: Tom Orcutt 716-373-3190
Secretary: Jamie Bowen 716-378-5860
Newsletter Ed: Tad Manske 607-478-8184

Planning Board: Jim Goodemote 716-372-1137
Planning Board: Clifford "Kip" Karn 716-968-1395
Planning board: Don Wehlage 585-968-3067
STARS Webmaster: Bob Bush 716-372-1718
STARS Website: www.rcstars.org

IS THIS THE FRONT PAGE?!?!

FROM THE NEWSLETTER EDITOR'S DESK...

Yes, I know this column is supposed to go at the end of the newsletter- certainly not on the FRONT page! But, I have a special reason for putting it here (for this month only- I think).



This month's newsletter is so **CHOCK FULL** of articles, that I wanted to make sure you knew what you'd be reading about... before you "wade" into all of them.

Yes, of course we'll have the third installment of Walt H.'s "Principles of Flight". This month Walt will be talking about lift, thrust, drag, and that word that's not one of our favorites- stall.

And of course we'll have Jim K.'s latest "Member Bio of the Month", this time featuring our very own secretary, Jamie B.

Jamie's "Minutes of the General Meeting" we couldn't get along without either. I'm so grateful for Walt, Jim and Jamie- they've been with me since my first month as editor- thanks guys.

Ed F. has sent me a copy of the latest STARS Membership Roster, and you'll find that printed this month also- thanks Ed.

Randy B. sent me the schedule of Flight Line and Parking Duties for this year's rally- you'll want to be sure to check that out (and find where you're posted). Speaking of the Rally, by the way, (just in case you haven't heard...), Jim K. has volunteered to lead the publicity effort for it. He asks that if any of you fellas have information or ideas about said assignment- you get ahold of him and let him know the details. He wants very much to do a bang-up job (which we all know he will).

A new feature begins this month, one which at times may be monthly, and/or at times "when the feeling strikes him" (both of which are truly appreciated by this editor). Jim Messer will be sending me a column entitled "Looking Back". It will contain interesting memorabilia and reminiscing from the STARS past. For lack of a better title, I would sub-title this first excerpt "Dewey in the Slammer".

Lastly this month, I give you a short look at another side of one of our members. Yes, he certainly is a great builder and flyer, by Ed F. has other facets to his expertise. Inside you'll find some great pictures (and explanation) of a 1968 Ford 120 garden tractor that Ed completely restored- you won't be able to tell it from new (except for its "styling" naturally).

Well there it is for June... Enjoy! *Tad Manske*

PRINCIPLES OF FLIGHT by Walt Hibbard

It's a beautiful model. It has completed several test flights at the hands of an accomplished RC pilot. He has trimmed it to perfection and it flies like a good trainer. Now, it's time for the owner to enjoy his first flight with his new pride and joy. He lines up on the runway, advances the throttle, waits a second then applies up elevator. The aircraft breaks ground and starts to climb. Suddenly it wobbles, drops a wing and dives to destruction.

This is a common way for models to meet their end, but why does it happen? Why should a proven, stable, well behaved model meet its demise on its owner's first flight? To answer this, it will be necessary to understand the following: **LIFT**, **THRUST**, and **DRAG**. We need to understand what these forces are and how they interact during flight. We also need to understand the term **STALL**.

First, let's look at Lift. Lift is that force which opposed gravity. To understand it we need to first understand the natural law known as Bernoulli's principle which states that a moving fluid (air is a fluid) exerts a lesser pressure than an equal volume of the same fluid at rest or moving at a lower speed. The shape of the wing and the angle at which it is presented to the airflow causes the air to have to travel a longer distance when crossing over the top than it has to travel crossing under the bottom (both in the same amount of time). The resultant pressure differential results in higher pressure on the bottom

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Model Aviation Principles 101... "Speed is life; altitude is life insurance. No one ever collided with the sky!"

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surface forcing the wing toward the lower pressure above. If this differential becomes great enough, flight will result.

Next comes Drag. Drag is the force which opposes forward motion of the aircraft. It comes in two basic forms. (1.) parasitic drag caused by those parts of the aircraft that stick out into the airstream, and (2.) induced drag which is produced primarily by the wing as a byproduct of producing lift. It is proportional to the amount of lift being created and is the form we will consider below.

Third is Thrust, which is the force produced by the propeller (or jet engine) which counteracts drag and moves the aircraft forward through the air.

Finally, we come to the Stall which is a sudden loss of lift. It can be caused by too little airspeed or by turbulence above the wing which most often results from too great an angle of attack (the angle at which the wing is presented to the airflow).

With this information, let's see if we can deduce the probable cause or causes of the demise of the above model. We know that we must have enough airspeed over the wing to produce adequate pressure differential to allow flight. Is it possible that the pilot did not provide enough throttle or allow a long enough take off run to gain safe flying speed? Did he forget to allow for a wind speed or lack thereof? Did he force the aircraft into the air too early by applying too much up elevator? Remember, since this action would have increased the angle of attack, it would also have increased the lift produced by the wing which could have caused the craft to leave the ground. However, this increase in lift would have been accompanied by an increase in drag which, without enough thrust, would then have caused the craft to slow down resulting in a loss of lift and therefore a stall. Or did he simply increase the angle of attack too much, during the climb out, resulting in turbulence which caused a sudden loss of lift?

Too little power, forcing flight with the elevator, ignoring the wind speed, or too high an angle of attack; any one of these, on their own, could result in a stall. A combination would be extra deadly.

To avoid this type of accident, the pilot must always make sure that his aircraft has adequate airspeed before trying to take off (a properly trimmed and balanced plane should take off with little or no up elevator once flying speed is reached). After breaking ground, a moderate climb should be established until a safe airspeed and altitude is reached; all this before attempting any but the most gentle of maneuvers.

Next time, we will look at some other causes of stalls and some ways to prevent them. You should note that what is presented in this column are brief and simplified explanations of what is a very sophisticated and sometimes complicated area of physics. My only goal here is to provide the RC pilot with a basic understanding which may help him or her to have a more pleasurable hobby experience with less frustration and fewer lost models. Therefore... if you have a question or need further clarification, or even if you just wish to argue a point (I can learn too); please feel free to let me know.

'Til next time, may your skies be blue and the winds be calm.

MEMBER BIO OF THE MONTH

Do you know the guy who sits up front during the meetings and plays video games on the laptop? That's Jamie Bowen. Well, he's not really playing games, he's our secretary, and he's up there keeping meticulous notes of our meetings. Read on to get to know Jamie a little better.

Jamie and his family make their home in Olean. He is employed at Dresser-Rand Turbo Products Division as Manager of the packaging department. This department is responsible for the design of lubrication and seal gas systems for centrifugal compressors sold in the oil and gas market. He has been married to his loving wife, Marla, for fifteen years, and they have one son, Codie, who is twelve years old. Codie is really into action figures and video games. (Sounds like my kind of guy.) Lately, however, he's been doing some flying in the Cuba gym during those long winter months.

Other interests of Jamie include electronics and metal and wood working. He also enjoys both water and snow skiing, as well as boating. Jamie shares how he got interested in flying: "At a young age I had always taken an interest in aircraft. During my childhood, my dad would take me to the STARS Rally and I would always go home dreaming about flying one of the planes that was flown at the Rally. I was thirteen at the time and was building the free flights, then went on to control lines. Then I got an R/C four channel for Christmas one year with a Falcon 56 Trainer and a Fox engine." Also as a kid he built an airplane strip that his folks still mow. The rest is history. His favorite plane to fly is the Katana.

Jamie writes of his best flying experience: "I would have to say my best flying experience was my first successful flight when I was thirteen years old and actually was able to control a model from the ground rather than having the wind control my free flight aircraft." His worst experience occurred when he took three planes to the field and returned home with none. It's a pretty simple story: Fly one, crash it, fly one, crash it, etc. The main problem was that radio signals back in the late 70s weren't that good. Fortunately, some were kits so they could rebuild them.

On his opinion of glow vs. electric: "To me, glow or electric both have their place and I have truly enjoyed flying either. Today, I would recommend a beginner fly electric simply because electric typically requires minimal support equipment. Secondly, flights can last 15 to 20 minutes because of the advancements in battery technology. Electric will certainly outper-

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form glow because of its instantaneous response to throttle control. Glow, on the other hand, has that wonderful smell and awesome sound of power, especially the four-stroke engine when you do a slow or fast flyby.”

Jamie feels 3D is simply awesome and is a real pleasure to see someone who has this talent, and to see several of our club members perform this highly skilled task. Speaking of highly skilled tasks, Jamie’s area of expertise is with small, one-ounce electric planes and foam cutting.

His advice to us beginners: “...don’t give up and always ask others for help whether it be model building, flying, or what to buy”.

Until next month, happy flying.

Jim Keough



Membership:

Ed F. reported none at this time.

Field Maintenance:

None at this time.

Member illness or other:

None at this time.

Airshow/Rally:

Jim K. has volunteered for publicity.

Jim G. presented the new flyers.

Randy B. - Flight Line Schedule

Don W. reported STARS still has 11 multi-channel and 5 single channel working radios. Don will continue to do more research on possibility of purchasing new radio equipment.

Old Business:

Flight Instruction:

Dave P. reported Clark F. has passed flight school. Congratulations Clark.

Show & Tell:

Dave P. presented his Nitro Ultimate 120. Powered by a Saito .125 4-stroke and total weight of 8.5lbs.

Meetings:

Next Planning Board Meeting will be at the field, May 26th at 7PM.

Next Regular STARS general meeting will be at the field, June 11th starting at 7pm

Motion to adjourn was made by Gary B. and seconded by Jim G., all were in favor.

STARS Minutes of the General Meeting of: 5/14/08

Attendance:

Gary Baker, Brad Davis, Randy Bittinger, Jamie Bowen, Bob Bush, Ed Flicker, Clark Follett, Romona Follett, Jim Goodemote, Walt Hibbard, Gordon Hooper, Kip Karn, Jim Keough, Tad Manske, Bill Messer, Tom Orcutt, Dave Pratt, Don Wehlage, Mike Zias

Minutes:

The minutes of the May meeting were read by Jamie Bowen. Motion to approve by Randy B. and seconded by Brad D. All were in favor.

Treasurers Report:

Tom O. gave the monthly report. Motion to approve by Randy B. and seconded by Don W. All were in favor.

IMPORTANT RALLY INFORMATION!

I received the e-mail below from Randy B. this past week. In a subsequent e-mail he also noted that it's getting harder and harder to find people to fill the schedules, especially since he already knows some members who won't be around that weekend.. You'll notice there is already one open hole... in the 12-3 time slot on the Flight Line Chart. If you're not on one or either one of these lists, and could volunteer for one or the other, or both- PLEASE give Randy a call (You'll find his phone number and e-mail address in his e-mail).

"*Tad*

*Please find attached the Flight line and Parking Schedule as promised. As this is the first draft; please post in the newsletter. If there are adjustments to be made, it is the responsibility of the individual member to notify me either by phone (814-368-7528) or by e-mail rbittinger@atlanticbb.net with an alternate time they can be there. This was a very difficult task this year, as there are many older members who are not able to contribute in this department. We need **all the help we can get!** Please make it clear to all that it is **their responsibility** to contact me.*

Thank you, Randy"

FLIGHT LINE SCHEDULE		
9:30 - 12:00	12:00 - 3:00	3:00 - 5:00
Dewey Barron	Gerid Bittinger	Ed Flicker
Gary Baker	Bob Means	Tom Orcutt
Dick Hawkins	Clark Follett	Ramona Follett
Brad Davis	Gene Hickey	Jeff Coast
Ruppert Pistner	Fred Fowler	Ron Jedrosko
Bill Messer		Jamie Bowen

PARKING SCHEDULE		
Duty	9:00 - 12:00	12:00 - 3:00
Gate	Dave Pratt	Walt Hibbard
Parking	Gene Hickey	Ron Jedrosko
Parking	Gerid Bittinger	Tom Orcutt
Parking	Ramona Follett	Jamie Bowen

ANOTHER SIDE OF ED FLICKER...

Ed sent this information to me (as he said later) "by mistake". It was supposed to go to another member who had requested it. Well.... I didn't consider it a mistake- I was very impressed by what he had done. I asked him if he'd mind if I included it in the newsletter this month. He very graciously has allowed me to do so. I know you'll be as impressed as I was!

In the few short words that accompanied the great pictures, I could tell that this reconditioning effort was a true labor of love for him.

This garden tractor had belonged to his Dad, and was the only one he had ever owned. Quoting Ed, he said "my dad bought this FORD 120 new in 1968 and it served him well."

In a two-year effort (interrupted by enlarging his garage) Ed disassembled the tractor, cleaned all

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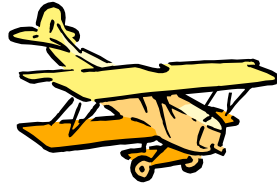
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the parts, painted them and reassembled it. Before re-assembly he had to replace the original piston, rings, connecting rod and valves- the trusty ol' machine had been burning oil.

Ed went to Jim Goodemote for the decals (which sure make it look like a new machine!) and now enjoys it the way his Dad did, or as he says "... pushing dirt around with the snow plow".

It may "never get off the ground" like so many of Ed's creations we've seen, but it certainly is a work of art.

LOOKING BACK...



Beginning with this issue I will try to introduce one page into the monthly STARS newsletter, with some event from the past that the newer members probably know nothing about. The subject matter will vary, but will deal with club history in one form or another.

The year was 1963, when I know for a fact that Dewey Barron spent two nights in jail in downtown Hamilton, Ontario, Canada! Yikes! **Dewey in jail?** Na – that's not possible. **Or was it?**

This happened when Dewey, Bill & Jim Messer drove to Hamilton to participate in a free-flight meet at the Mount Hope Airbase, near Hamilton.

When we reached the airbase that evening, it was raining cats and dogs – and we only had with us two little tents to sleep in. We asked the guard if we could go onto the base and sleep in a hanger to stay out of the rain, and he said – "No Way".

As we pondered what to do, a police car drove

up, so we decided to ask him if he knew of a dry place that we could pitch our tents. No – he didn't know of such a place but he volunteered he could put us in jail for the night, each locked into individual cells, and we couldn't get out until 8:00 the next morning. That sounded pretty good at the time, so we followed him downtown. He booked us in, and locked us each into a neat little cell, and gave us a blanket to keep us warm. Each cell had a plank to sleep on. It wasn't the Conrad Hilton, but it was better than getting wet in the rain. True to their word, the next morning they let us out right on schedule.

That day we flew and chased free-flight airplanes on foot, and by nightfall we were pooped, to say the least. Guess what? Before we had a chance to set up our tents, it started raining cats and dogs once again – so you guessed it. We jumped into the car and drove downtown to the jailhouse, and asked if we could spend another night there. They said: "Of course", so it was back into the locked cell with all the true criminals in adjoining cells. I wonder what they were thinking?

All in all, it was an experience we shall never forget. How many law abiding citizens have had the opportunity to spend two nights in jail? I know of three. Do you know of any more?

Jim Messer...Thanks for the memories!

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Next Regular Meeting @ the field
in Cuba, Wednesday, June 11th

Next Planning Meeting: TBA

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C/O Tad Manske
PO Box 83
Andover, NY 14806-0083