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SEPTEMBER BIRTHDAYS

Jerry Keller 3rd
 Jansen Smith 18th
 Harry Price 19th
 Richard Strahs 19th
 Chris Kachadurian 20th
 Shelia Fowler 23rd
 David Carter 27th
 A VERY HAPPY
 BIRTHDAY TO ALL!!

THE NEXT MEETING IS:
September 2nd
 October 7th, November 4th

The deadline for contributions to the next newsletter will be:
September 15th.

Our Warbird Fly-In is coming up real soon. I'm confident that we can count on all of you to pitch in a make this a fun and successful event.

Keep 'em flying, keep it safe and above all have fun!

Real Flight R/C Simulator

Part 2
 (Continued from last month)
 By: *Edward Walker*

Your Personal Virtual Airforce
 There are nine planes to choose from: I've flown every model here in real life, and the handling characteristics of the simulator match very well. The big P51 is especially well done as it can be difficult to land if you don't work your throttle/rudder properly (The P51 also has functional retractable gear).

Where do you Want to Go Today? (not to be mistaken for the Microsoft slogan...)

There are five flying fields to fly at. You'll probably find that you prefer one or two, but it is actually very good practice to fly at all of them. Why? Each has different backgrounds, different clouds, and different lighting! It actually helps you develop skills in controlling the model when you can't see it very well - a situation that can occur

when flying R/C. You can fly at other fields with brighter backgrounds, or turn off the shadows altogether. The backgrounds themselves are just that - backgrounds. You are flying within a "dome" universe. You cannot hit the trees in the background or the hills, they are just the edge of the virtual R/C flying field. They are flat "wallpapers" that you can fly up to and they just get grainier and bigger, but you cannot actually run into them. They are not actually objects in the simulator (like the tree's, rocks, and other objects you can turn on - see below). The clouds are very well done. Between the five fields, you've got a pretty good selection of clouds to work with - all looking very real.

RealPhysics: How does it Feel?

No matter how good a simulator looks, it's how real it feels that counts. The physics in this simulator are outstanding. It feels real. Examples:

- Take the Ultrasport and go vertical, as the speed slows, you kick in full rudder for a stall turn. The aircraft stalls and on the down line the tail wags back and forth showing that it was a full stall - just like the real thing.
- You take the Ultrasport and go vertical, as the speed slows, you kick in full rudder for a stall turn. You are too late on applying the

The President's Korner

By: *Jim Nunnallee*

It has been quite awhile since we've had a serious frequency control incident or personal injury at the field.

At last month's meeting, our safety officer mentioned that we need to be continually diligent and deliberate about our frequency control procedures. The very next day, after a flight I returned my frequency flag to the board, put my transmitter on the rack and sat down to exaggerate and tell some lies. About 15 minutes later, much to my embarrassment, someone noticed that my transmitter was still on. We cannot afford to let ourselves get complacent - complacency is what leads to crashed airplanes and even worse, personal injury. Please continue to keep our frequency control procedures and general flight safety matters at the top of your list when you are at the field.

Aerobatics Flying & Judging Clinic

The Imperial Radio Control Club will be presenting a "how to" clinic on aerobatics flying and judging on **Saturday, October 2, 1999**. Anyone wishing to learn or improve their aerobatics flying skills or are interested in being an aerobatics contest judge are invited to attend this clinic.

Experienced competition pilots and judges will be on hand from **9:00am until 1:00pm** to offer advice and instruction on:

- 1.) *Intermediate and advanced aerobatics maneuvers.*
- 2.) *IMAC / Pattern format and rules.*
- 3.) *Aerobatics aircraft design and setup.*
- 4.) *How to judge aerobatics sequences.*

We will also be answering any questions on general Airshow/Event duties such as Radio Impound, Aircraft Inspection etc.

If you've ever wanted to learn more about these subjects, this will be your opportunity come out, have fun, and improve your flying ability, and best of all, it's FREE!

For more information or questions call: Keith Hunt (941)688-8078 or Email Airsouth@gte.net.

(Continued from page 1)

- rudder and have lost too much airspeed. The nose flops over in a full forward stall.
- You are learning to land with the PT40. You come in too fast and steep and bounce off the runway - 6 feet back into the air! 3 bounces later the model finally comes to rest. You didn't crash it.. but you came close.
- Landing time with the Mustang, you chop the throttle and it starts sinking like a rock (warbird!). You try pulling too much elevator on the flair. Tip Stall. Smash! You just learned how not to land a warbird.
- Flying the glider on the breeze, you detect some lift, you catch the thermal and climb back to altitude as you hunt for more.
- On the runway with the P51 and hit the retract switch? Crash.. the model falls to the asphalt.
- Land on one wheel and drag your wing tip. It starts pulling you around in a circle.

To Zoom or Not To Zoom...

One of the biggest problems/complaints with R/C sims is that it is

difficult to see the model far away. It gets "lost in the resolution". If you've played with other R/C sims, you know that most of them have a "zoom" or "binoculars" feature which usually brings up a little box in the corner that shows you the plane's orientation. Nothing like real life.

The Zoom feature on this simulator is more of a "Focus". This simulator does the best job I've seen of zooming in and tracking the action. It's so well done and seamless that you don't even notice it happening. As the model gets farther away, the entire screen starts to follow/zoom in/focus on the model, and as you get closer you pan back to full view again.

I don't know if I can describe it any better, but you have to try it. If you've ever been annoyed by the fact that "on a simulator it's hard to fly far away", the problem is solved. Do you have what it takes?

Your computer's processor and video card are going to dictate what you can and cannot do with this simulator. You can run it on a 486/66 with a standard video card.. but don't expect to see anything fancy. You will have to run it

in Internal 3D mode and it will look very similar to the existing flight simulators on the market. The stronger the hardware that you have, the better the product gets. The minimum requirement for 3D (fancy) graphics is a Pentium 90 with 16 megs of RAM and some type of 3D accelerator card (there is a list of suggested ones on www.knifeedge.com).

Tip: *When you first install, start by turning all of the options off. Then, one by one add features so you can see what sort of effect they have (both whether you like the feature and whether it slows you down too much).*

I have the simulator running on a Pentium 166 with a Velocity 128 3D Card. The machine happens to have 256 megs of RAM in it, but I could change that to 32 or 24 and it would still run the same (processor and vid card matter more, as long as you have the base required RAM).

With my setup I can run in Complex 3D mode.. but I cannot turn on all of the optional graphic features (see below) before I notice a lag. I prefer to fly it in 800x600 mode, complex background, simple plane, and no field options or random sounds on. This gives me what I prefer: a smooth simulator feel. I prefer a higher resolution

instead of having some of the "fun features" because I'm using a 21 inch monitor, low resolutions look grainier. In simple graphics mode I can turn the resolution all the way up to 1280x1024 and it runs perfectly smooth and very realistic - far sharper image than the simple graphics of my other simulators, because even though they too use vector graphics, they do not support SVGA.

Configuration:

The simulator is very easy to run.

You literally can just click on the plane you want, the field you want, and FLY NOW.

The real fun (other than flying) beings when you start customizing the simulator. For system performance, this is important. The first thing you want to do is to find out what your computer is capable of handling... i.e. just how many great features can you turn on without your computer running like molasses. You'd have to have a heck of a computer to actually turn all of the options on, but as you upgrade your machine over time, the simulator can then take advantage of your new faster hardware.

Some Fun Configuration Features to Toggle, Adjust, and Play With:

- Each field has it's own graphic additions that you can turn off/on to add to the realism. For example: one field may have a water tower, another trees and a parking lot. I recommend turning on the wind sock if you are going to turn on the wind. Here are some samples:
- You can turn on other planes! They fly around and do stuff on their own while you fly. They do some cool things and some annoying things, just like the fliers at your field. Great way for beginners to learn to concentrate on their model.
- You can turn on sound effects.. not only music, engine noise, and crashing, but
-

- random sounds you might hear at the field. Stuff like guys yelling "Lower!" or "Bet you can't do that again!". Very cool.
- Each engine even has it's own distinct sound - the burble of the P51 at idle, The scream of the glider's little engine climbing out. The 2 stroke OS going by.. they all sound real.
- You can fully edit the models. Move the CofG, change the wing chord, change the airfoil, change the control surface throw, change the servo assignment, etc etc etc!
- You can edit the engines and props! Do you have an Ultimate with a ST90 in it? Want to try a different prop? Want to try more horsepower and see how it fly's?
- I could go on and on about these features... but there is far too many to deal with here. I don't even know if I've found them all yet.

By adjusting these features you can make the simulator smoother if your computer is having troubles keeping up. The more features that you turn on, the more power you need. As you go through the following screens, take a look at the details and options in each screen.

Point of View:

Another unique feature to this simulator is the ability to change viewing angle. You can stand at the field like you normally would, fly from inside the plane, follow behind the plane, watch someone else's plane (the computer flying), fly from the planes current location (i.e. move there then stay there), etc. This allows for some pretty neat perspectives. When you fly from

Courtesy and common sense makes R/C modeling fun for everyone.

within the plane, the graphics speed is very impressive as you zoom down the runway on take off. I actually made myself dizzy on several occasions.

Screen Shots:

A couple of screen shots. There are many more available online at both www.knifedge.com and www.realflight.com .

Regular Meeting Minutes

Aug. 5, 1999

By: *Keith Hunt*

Secretary

Meeting called to order at 7:38pm, all officers present.

Attendance, 20 members, (insufficient for quorum).

Total membership - 95 members.

New Members - Rob Lerner and Brian Lerner.

Instructors Report - Harry Price not in attendance due to illness.

Field Maintenance - FMO Ed Deeson requests members not to leave "junk" in the trash cans.

Safety - It has been reported that members have been "sloppy" in using the frequency pins. Please pay extra attention to our frequency control system.

Old Business - Unable to vote on by-law change due to no quorum. The vote will be at the August meeting.

New Business - Keith Hunt advises of plans to hold an aerobatic flying and judging clinic at the field preceding the upcoming IMAC contest. Experienced competition pilots will be on hand to help anyone interested in judging and/or flying aerobatics.

Plane of the Month - Ed Deeson presented his PT-17 Stearman.

8 Ball Award - Joe Wedeman and Tom Meyer. They were flying the only aircraft in the air and collided at "airshow" center.

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• COMING AREA EVENTS

- War-Birds Unlimited September 11th & 12th
- Florida Aerobatics - IMAC October 9th & 10th
- Florida International
Jet Rally October 22 - 24
- IRCC Swap Meet November
- IRCC/IMAA Winter Rally December 4 - 5

• HANGAR SALE

- Charlie Patterson has Club patches for sale \$ 1.00 each . He also has hats. See him at the field or call him at 859-3090.
- **Sig 1/4 Scale Cub:** *Will someone buy this beautiful airplane!!*
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Meeting Dates P-1
Meeting Place P-1
New Meeting Time:
7:30

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