AMA Chapter 534,
Medford, Oregon

The Rogue Eagle

September 2001

September 8 Fun Fly, Family Potluck and Social Event

I am planning the following family program for September 8, 2001. The program is a fun fly potluck. This is an AMA sanctioned event, so please bring your AMA membership card. The entry fee will be $4.00 per person or family. Please bring your family and a food dish, such as potato salad, Jell-O, baked beans, cake, pie, etc. The club supplies hamburgers, buns, condiments, soft drinks, and utensils.

Sign-up will be from 9:00 to 9:30 AM. Each entry receives $10.00 worth of poker chips and for each event you enter, you will receive additional chips. The following events are planned:

- Taxi
- Egg event
- Lunch – about 11:30 – Hamburgers will be prepared by John and Cheryl Colwell.
- Touch and go
- Bomb drop

Participants will use the poker chips earned during events to bid on prizes to be auctioned. The auction will follow the events and is tentatively set for 1:30 to 2:00 PM.

Open flying will be allowed after the auction. I need help from club members to handle the poker chips, co-ordinate each event, judge events, and auction the prizes. Please contact Chuck Holden, 776-5153 or cwholden7399@cs.com.

By Chuck Holden

AMA Sends Thank-you Note

Dear Contributor: On behalf of The Academy of Model Aeronautics, Inc., thank you for your $200.00 donation toward the Museum Fund, received 07/09/2001. AMA members like yourself are vital to our effort to further develop a world-class aeromodeling facility in Muncie. The impact of these contributions has been enormous and is appreciated by the entire aeromodeling community. I hope you will convince others that the Academy and the museum are now undertaking projects that are important and urgent, and should be supported by as many members as possible. Thank you again for your generous support.

Sincerely, Academy of Model Aeronautics

Teaching R/C Flying

By Mike Lynch

Teaching How To Master Turns & Level Flight

Objective: To get the student to a point where they can keep the airplane in the air with no help from you. At the end of this step, they should be to the point that you are not constantly fearing for the airplane as they fly. We assume at this point that the training airplane has had a trim flight and any necessary control surface adjustments have been made. We also assume that the beginner understands the basics of aerodynamics and flight, including a knowledge of the influence each control surface has on the airplane. Finally, we assume that the beginner understands the rules (especially the safety-related rules) of your particular flying field. The time it takes the student to master this step varies dramatically. The student should not be in a race to master every procedure as quickly as possible.

Begin on the ground by explaining that turning is basically a three step procedure: 1) bank with the ailerons, 2) maintain the turn with up elevator, 3) level out with the opposite aileron. Demonstrate turning with hand movements as well as on the stick of the transmitter. Explain that even trainer planes tend to be quite responsive and that only a **little** motion of stick will be sufficient to maneuver the plane. While the student cannot really get a feel for flying while on the ground, you must prepare them for what to expect in the air. If the plane has ailerons, I recommend having the beginner ignore the rudder when turning. RC airplanes, and especially trainers, turn quite nicely with a simple combination of aileron and elevator.

On the student's first flight, begin by demonstrating a turn. Try to get the plane in an attitude where the student can see both the plane and the transmitter to see the small amount of control you are giving (hold up the transmitter to show them). After entering the turn, stress how important it is to maintain level flight with up elevator. Also demonstrate how a trainer airplane tends to self correct, meaning minor aileron corrections may be required to hold the bank angle. Finally demonstrate exiting a turn with opposite aileron control. Demonstrate this in both directions, stressing the three step nature of turning - bank with aileron - hold the turn with up elevator - straighten with opposite aileron.

The beginner's first few attempts - We're assuming you're using the trainer (buddy box) system. Begin by getting the plane into a perfect turning position, at a safe altitude by aiming the plane toward one of the near corners of the field (left or right). This way, soon after the student takes control (by your holding the trainer button on the master transmitter), they will immediately begin the turn. Always have them turn the plane in a direction away from the pits (turning right on your left side and turning left on your right side). It is quite likely that the beginner will immediately roll the plane over on its back, so be ready to take control. Remember, you control when to take over. As soon as the student is in trouble and you retake control, right the problem and set the plane up again for another turn attempt. Though you have explained the three steps to turning on the ground and the student may have seemed to understand quite well, when in the air, the student will probably have problems remembering these three simple steps. Also, they will not be able to give the correct amount of aileron and elevator to make good turns. For these reasons, you will probably have to talk them through their first few turns (though be careful to stick to the main points of the step so as not to get them confused): bank with aileron, hold the turn with up, and straighten with opposite aileron. Save any discussions that are not directly related to the subject at hand for when the plane is on the ground. After each flight, be sure to review the flight with the student. Stress those areas where progress has been made and be sure to offer praise. For those things the student is having problems with, you now have the student's full attention and can offer advice and constructive criticisms.

One more point: Make sure the student is not just mimicking your instructions and confirm that the student understands the maneuver you are teaching. Once they are following your instructions and turning quite well, be quiet and just watch them fly. If they continue to do well, they truly understand the maneuver you have been teaching. If the student is having problems making turns (as most will), concentrate on each step independently. Begin by making sure they can give the correct amount of aileron control to get the desired bank angle. Beginners have the tendency to give too much control, rolling the plane to a very severe bank angle. Keep stressing how little stick control they need to give. Make sure they understand the relationship of bank angle to the plane's tendency to lose altitude. The more bank angle, the more the tendency to lose altitude quickly. Make sure they are making gradual, level turns, neither gaining nor losing altitude. Stress the relationship of bank angle to elevator. The more severe the bank angle, the more up elevator required to hold altitude (and the tighter the turn). Also stress that it is important to begin giving **up** elevator as soon as they see the wingtip begin to drop to the desired bank angle. Beginners tend to wait too long, and the plane loses altitude before entering the turn. Beginners also have the tendency of forgetting which way is up. Stress that it's just like a full scale aircraft. Pulling back on the stick makes the plane go up.

As they progress further in this step, stress the importance of maintaining the bank angle with aileron control throughout the turn, especially if they're flying a very self correcting trainer plane with a flat bottom wing and a lot of dihedral. Have them practice this by making full 360 degree turns. Once they master the 360 turn in one direction, have them practice it in the other. Also, once they can perform one 360 degree turn, have them continue the turn several times, making several 360 degree turns consecutively. This practice forces the beginner to maintain a gradual turn for a long period of time. Finally, have them concentrate on exiting the turn by applying opposite aileron until the plane is flying level again. The most common problem here is that the beginner

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Teaching R/C Flying

forgets which way the plane is turning and they attempt to straighten by applying the wrong aileron direction to exit. As the instructor, you must be prepared for this mistake every time the beginner ends a turn! The lower to the ground the airplane is, the more important it is that you be ready. One way to help the student with this problem is to have the student keep saying (out loud) which way they are turning throughout the turn. They will then know which way to exit the turn. Another common problem for beginners exiting turns is they continue to hold the up elevator too long. This will make the airplane climb at the end of the turn, and possibly cause a stall. They must practice until they can exit the turn at the same altitude as entered.

In summary: By forcing the student to make turns in both directions and in several different positions in the sky, and by keeping quiet and making them turn by themselves (after you think they understand), you should be able to confirm whether the beginner truly understands turning. Second, you must force them to turn gradually. When they turn radically, it will be difficult (if not impossible) for them to come out of the turn on a predictable heading, which will be very important in the next step to flying. Point out that turning gradually is the most difficult way to turn.

Be sure that the student practices left and right turns equally. With no intervention from you, most students will fall into the habit of making turns in only one direction. Force them to practice turns in both directions, stressing that small corrections must be made with ailerons and elevator to maintain level turns.

NEXT TIME: Throttle settings.

2001 Club Officers And Coordinators

President:
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Vice President:
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Danny Watson 488-2179
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Sam Arrigo 597-4573
Chief Flight Instructor:
Jay Strickland 855-7161
Flight instructors:
Jim Warner 560-4099
Richard Schwegerl 773-5479
Bill Grove 955-0634
Robert McLane 479-1919
Video Librarian:
Clark Wolf 773-4270
Air Show CD:
Bill Grove 955-0634

Winners of the Air Show raffle

1. Ready to fly airplane; Chris K. from Ashland
2. Flight box; Bob Wolcott from Medford
3. Dinner; Stan willems from Medford
4. Saw blade; Sam Arrigo from Selma
5. Dinner; Mike Godfrey from Gold Hill
6. Dinner; Ashley Anderson from Central Point
7. Dinner; Jerry Sivin from Talent
8. Dinner; Al Traugott from Medford
9. Dinner; Norm Farrell from Medford
10. Dinner; T. Rothe from Medford

Winners for most raffle tickets sold

1. First Place; Richard schwegerl [Hi-Tech servos]
2. Second Place; Wm. Coffee [Mechanical Retracts]
3. Third Place; Kai Aiello [Stealth antenna strip]
4. Fourth Place; Vicki Ward [Dual strut nose gear]

Winners should pick up their prize at the next board meeting (Aug 28), or at the September regular meeting (Sep 11), if they have not done so already.
By Danny Stanton

2001 Events

April 7 – Spring Fun Fly Potluck
May 5-6 – Agate Float Fly
OMPRA Racing - May 12
May 20 – Ashland, OR EAA
June 2 – Lee Renauld
June 23 – Military Fly In
July 7-8 – Big Bird Fly In
August 4 – Hawthorne Kids Day
August 11-12 – Airshow
September 8 – Fun Fly Potluck
October 13-14 – Agate Float Fly

Rogue Eagles R/C Club,
P.O. Box 8332
Medford, OR 97504

Stamp

To:

NEXT MEETING is September 11. Please bring your projects for show and tell.

NOTICE!

We now send out email reminders of member meetings telling what the program will be, also reminders of our contests and activities. If you are not getting these, please send your email address to jsivin@aol.com

By a decision of the Board at the board meeting on July 24th, NEW members who join the club after August 1st this or any year hereafter, will be charged dues of $12.50. When they renew the following year, the full dues rate will apply. This reduced rate does not apply to current members who decide to renew their membership after August 1st.

Notice! Notice! Notice!

In order to streamline and reduce club expenses distributing the monthly newsletter, the Board of Directors asks that you comple the following questionnaire and bring it to the next meeting at **07:30 PM, September 11, at the Lions Sight and Hearing Center, 228 North Holly, Medford, Oregon**. If you can not attend, please e-mail the Editor (wkbruck@gateway.net) to inform him of your choices. **IF YOU SUBMITTED THIS QUESTIONNAIRE BEFORE, DO NOT SUBMIT IT AGAIN!**

1) **Would you prefer to see the newsletter in living color on the club web site**? Circle **Yes**, or **No.**

2) If 'Yes' please give your name and e-mail address:_____