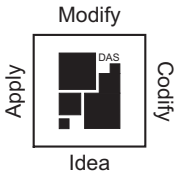
Phase I Sport Aerobatics Introduction



The Mission: To establish a foundation of sport aerobatic fundamentals on which to build.

DAS System: 1. Feature the essential techniques required to routinely perform looping and rolling maneuvers. 2. Address each maneuver's individual steps in the order that they will be flown. 3. Accomplish each maneuver in its basic form. 4. When each becomes routine, introduce new maneuvers. 5. Assemble a series of maneuvers into a continuous aerobatic sequence, add variations, and practice.

I, David A. Scott, developed the basis of this *Sport Aerobatic* training system utilizing the same DAS System format of our accelerated *Primary Solo* flight training program: Each maneuver is broken down into its known sequential components and first practiced in its rudimentary form to facilitate early success, routine, and a sense of being ahead of the airplane (Phase I). Once each maneuver becomes routine, the effort initially required to accomplish those maneuvers can be re-directed to more effectively adding refinements (additional steps) and new maneuvers. No other approach has proved as effective at keeping the R/C pilot's flying experience forever new, increasingly satisfying, and above all more fun!

Sport Aerobatic Efficiency Requirements:

- A good airplane and airplane setup.
- A crawl-walk-run approach to teaching and learning.
- Understanding control input effects upon aerobatic flight.
- A foundation of straight and level lines flown parallel to the runway.
- Ground references.
- Altitude.
- Speed/throttle requirements.
- Maintaining proper entries into maneuvers.
- Sequencing individual maneuver steps.
- Ability to reflect (learn by example).

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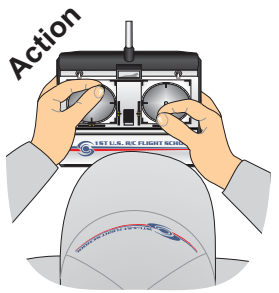
PHASE I

Outline of Instruction - Reactor v/s Controller

The specific techniques featured in this program were developed from observing the two primary *types* of R/C flyers: A traditional *reactor* relies on the airplane to tell him what to do and when to do it. These individuals, by definition, are slightly *behind* the airplane, and therefore progress at a slower rate. In other words, *reactors* benefit the least from their practice because they remain too busy responding to deviations to learn how they might be prevented in the first place — often resulting in dramatic differences from one attempt to the next as well.

The quintessential *controller* is knowledgeable, initiating maneuvers using predictable commands with the airplane following along. In other words, these proficient individuals are *ahead* of the airplane. They progress at the fastest rate and learn the most from their practice due to being less consumed with the fundamental execution of the maneuvers. Consider that when the initial input *commands* are made correctly, the need for additional corrections or adjustments may not even exist, and that is when and how you will be free to think ahead of the airplane and/or more clearly reflect on the lessons learned. From all my observations and experience, I can sum-up the keys to successfully learning any new maneuver, in the shortest amount of time, are:

- Instilling *beforehand* the proper imagery of what makes up each maneuver and the mechanics of how each will be flown.
- Focusing the pilot's attention on *controlling* the airplane—not merely reacting to it.
- Specifically, *knowing* how to fly becomes increasingly important as higher speeds allow less time to "make it up as you go" while performing aerobatics.
- An aerobatic pilot especially needs to focus on *how* he or she applies the control inputs with a clear understanding of *what* the commands are going to tell the airplane to do!



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About the Manual

ATTENTION: The following course syllabus was developed and used for more than two decades teaching basic aerobatics, however, in addition to this program, dual instruction from a qualified aerobatic instructor is strongly encouraged.

The design objectives that make up this flight training manual are: To organize in sequence the steps necessary for the advancing pilot to constructively practice, and provide a source of proven information laid out in a way that can be quickly accessed while studying at home, practicing on a simulator or at the flying field – hence, each page can stand on its own, and most pages display a summary Key Point To Remember (KPTR) to aid retention.

Instructor's practice note: Each practice step facilitates (leads into) the next. If you should ever experience difficulty accomplishing a specific step, the solution often lies in refocusing on the steps that precede the difficulty, and reaffirming the foundation needed to overcome the trouble spot. You will find that performing aerobatics is not that hard when things are done in their proper sequence. Yet doing them with a high degree of control and consistency requires a solid preceding foundation and an organized approach (*knowledge*).

From its inception, the 1st U.S. R/C Flight School has been driven to learn from its experience. This teaching system consists of the approaches and techniques derived from training hundreds of R/C flyers from a wide range of backgrounds and abilities, both new and experienced in aerobatics, yet all sharing the fundamental goals of maximizing their practice time and establishing habits to propel them into an increasingly satisfying R/C experience.

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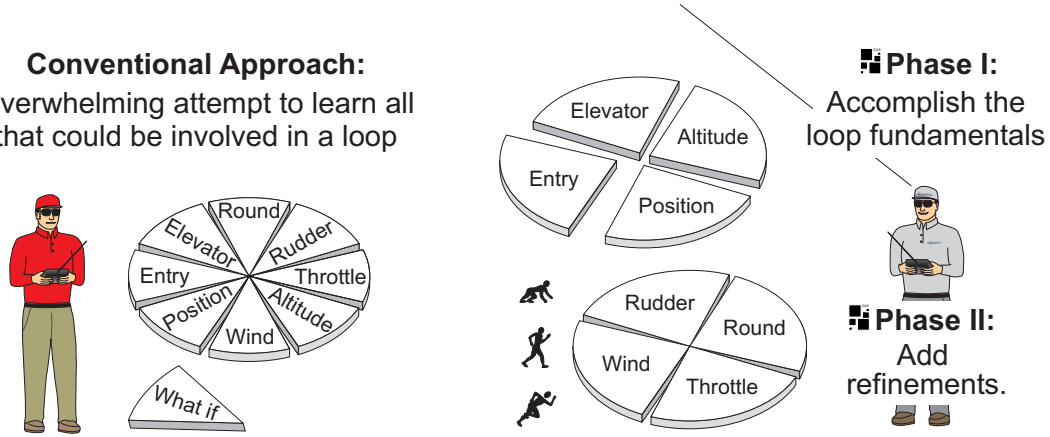
Utilize the ☑ Check boxes to keep track of your progress and current areas of practice.

Phase I Methodology: The Framework to Support the Finished Product

Conventional wisdom says anything worth doing is worth doing right. However, many new aerobatic pilots and their instructors take that to mean trying to learn the maneuvers as a highly experienced flyer would perform them, i.e., involving *perfectionist* themes. This program adheres to the fundamental premise that one must attain the *basics* before refinements can be attempted without becoming obstacles to one's success and confidence.

The purpose of 1st U.S. R/C Flight School is to promote conditions where the student pilot can learn for himself, therefore increase retention of the lessons, and continue learning beyond what was taught. (Compare, "Give a hungry man a fish, and you feed him for a day. Teach a man to fish, and he can feed himself for a life time!") By breaking down and prioritizing that which is essential to success (Phase I), and then what fits into the refinement category as a result of building upon that success (Phase II), the accelerated pace of practicing the lessons in more digestible pieces is the catalyst for achieving even greater degrees of aerobatic proficiency: "OK, I'm comfortable with that. What's next?!"



Preliminary summarys: 1. Once a person masters the basics, each of the next steps will seem that much easier to attain. 2. The fundamentals are the most important aspects to the success of each maneuver, and they are the fastest learned when not initially distracted by perfectionist themes. 3. The more that can be made routine and/or automatic early on, the more freedom one will have mentally and physically to add refinements and pay them the attention they will continually require.