



APPENDIX 5

ACHIEVEMENT AWARDS PROGRAM

1. PURPOSE

The IAC Aerobatic Achievement Awards program was formulated to promote and advance sport aerobatics. The IAC sanctions many regional aerobatic contests every year, but at the same time realizes that all pilots who fly aerobatics may not wish to enter competition, yet deserve recognition of their own abilities.

The Achievement Awards program provides the mechanism through which competition and non-competition pilots can work to reach the desired level of proficiency, under strictly controlled conditions, and always with an eye on safety. Aerobatic competitions benefit as more people are encouraged to enter; aerobatic education is more widely disseminated; and, aerobatics as a sport will grow as more people learn of the enjoyment, fun, and comradeship that is aerobatics.

These awards are not easy to achieve and a high level of skill is required. They are, however, within the reach of every pilot. When an award is earned, it is truly something of which to be proud.

2. GENERAL RULES

The flight or flights made to obtain this award shall satisfy the definitions of the following rules:

- (a) An applicant for an IAC Aerobatic Achievement Award must be a member in good standing of the International Aerobatic Club, Inc.
- (b) The awards are international in scope, as is the IAC. All pilots from all countries may achieve the awards as long as they meet the qualifications and requirements of this program.
- (c) All "IAC Official Contest Rules" will prevail with the following exceptions:
 - (1) There will be no maximum altitude except that the figures must be easily seen from the ground with the naked eye.
 - (2) Technical inspections will not be required.

3. CATEGORY CLASSIFICATIONS

- A. **Power** – There are five (5) categories of achievement awards that can be earned in SMOOTH (non-contest environment) and an additional five (5) in STARS (contest environment). A gradual step up in proficiency and skill is required to successfully complete the figures in progressive categories. The power categories are: Primary, Sportsman, Intermediate, Advanced, and Unlimited.
- B. **Glider** – There are five (5) categories of achievement awards that can be earned in SMOOTH (non-contest environment) and an additional five (5) in STARS (contest environment). A gradual step up in proficiency and skill is required to successfully complete the figures in progressive categories. The categories for glider are: Primary, Sportsman, Intermediate, Advanced, and Unlimited.





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4. SMOOTH AWARDS

Awards given in a non-contest environment are referred to as "SMOOTH" awards. Each category (power and glider) has a designated set of figures which must be successfully completed for a SMOOTH award. Primary through Intermediate SMOOTH awards may be earned using either Method A or Method B, described below. Advanced and Unlimited SMOOTH awards may only be earned using Method A.

Rules for obtaining a SMOOTH award which are common to both Method A and Method B are:

- (a) Each figure in the Category Figure Lists, Section 7 (Power) or Section 8 (Glider), must be flown and entered on a single application form clearly marked for that category and award.
- (b) These figures can be completed in either one flight or on multiple flights on different days, in different aircraft.
- (c) Breaking minimum altitude limits for any part of a figure will result in a zero (0) grade for that figure. The minimum limits for power are: Primary and Sportsman = 1500' AGL; Intermediate = 1200' AGL; Advanced = 656' AGL; and Unlimited = 328' AGL. The minimum altitude limits for gliders are: Primary and Sportsman = 1500' AGL; Intermediate = 1200' AGL; Advanced and Unlimited = 656' AGL.
- (d) In case the applicant is flying for awards in more than one category, each duplicate figure must be reflown and graded for each category's application.
- (e) Aerobatic maneuvers may only be performed in compliance with the civil aviation rules and regulations of the country in which the flight takes place. Waivered airspace may be required.



METHOD A *FLYING THE DESIGNATED FIGURES IN FRONT OF A CURRENT IAC JUDGE*

In addition to items (a) through (e) immediately above, a SMOOTH award being sought under Method A shall adhere to these additional requirements:

- (a) The Judge must be on the "IAC Approved Judges List" for either the current or immediately preceding calendar year and must observe the figures from the ground, recording a grade for EACH figure along with the date performed.
- (b) Each figure must earn a grade of five (5.0) or higher using Chapter 8 criteria.
- (c) There is no overall score or presentation grade as this is not a sequence, nor is a marked performance zone required. Contest practice days are appropriate occasions to earn SMOOTH awards.
- (d) The award applicant must be the sole occupant of the aircraft during SMOOTH award flights, except that a "safety pilot" for insurance purposes may be carried during Power Primary and Sportsman flights. Gliders may carry a 'safety pilot" in all categories. The applicant must be the sole operator of the controls when performing the aerobatic figures.
- (e) IAC members in good standing flying in locations outside of the United States may earn an Achievement Award by flying figures before a current judge from an aerobatic organization recognized by the FAI and IAC. The application for Award will be processed by



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the IAC Achievement Awards Chairperson following verification of the examining judge's credentials.

- (f) The judge must complete the application form using his/her printed name, signature, and IAC number, if applicable.

METHOD B FLYING THE DESIGNATED FIGURES WITH A GRADING CFI IN THE AIRCRAFT

Although the numeric grade for an aerobatic maneuver is predicated on what a ground-based judge observes and not on what the pilot sees, a CFI who is a current IAC member and who has also earned an Achievement Award (SMOOTH or STARS) that is at least two categories higher than the SMOOTH award being sought, is capable of determining whether a designated figure would earn a qualifying grade from a ground-based judge.

In addition to items (a) through (e) under Section 4 above, a SMOOTH award being sought under Method B shall adhere to these additional requirements:

- (a) The Grading CFI must:
 - (1) Be a current Flight Instructor certificated under the regulations of the licensing country's aviation regulatory agency. For countries outside the United States, the instructor must have competed in at least the Advanced level of competition.
 - (2) Be a current IAC member.
 - (3) Possess an IAC Achievement Award (SMOOTH or STARS) that is at least one category higher than the SMOOTH award being sought, as shown in Table A5.1, below.

MINIMUM REQUIRED GRADING CFI AWARD LEVEL	
Table A5.1	
SMOOTH AWARD SOUGHT	MINIMUM CFI AWARD LEVEL
<i>Primary</i>	<i>Sportsman</i>
<i>Sportsman</i>	<i>Intermediate</i>
<i>Intermediate</i>	<i>Advanced</i>
<i>Advanced</i>	<i>Method B NOT ALLOWED</i>
<i>Unlimited</i>	<i>Method B NOT ALLOWED</i>

- (4) If a MCFI-A, that instructor must possess at least an IAC Achievement Award (Smooth or Stars) in the Intermediate category to grade for a Primary, Sportsman, or Intermediate Smooth award.
- (b) The Grading CFI shall not assign a numeric grade to each figure flown, but rather note a grade of "Q" (*Qualifying*) on the award application for each figure which the CFI believes would have received a grade of 5.0 or better from a ground-based judge observing the figure.



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- (c) Each figure in the appropriate Category Figure List must receive a grade of “Q” to earn the Achievement Award.
- (d) In addition to name and IAC member number, the Grading CFI must supply his/her CFI certificate number with expiration date, along with their own achievement award level and type (SMOOTH or STARS) as directed on the application form.

5. STARS AWARDS

Awards given in a contest environment are referred to as "STARS" awards. STARS awards must be earned in competition at an IAC sanctioned contest.

- (a) A minimum raw grade of five (5.0) or higher must be awarded on each figure and on Presentation for all flights completed in a contest with four or more Judges, except ONE grade on EACH figure and on Presentation may be less than 5.0. In a three judge contest, ALL grades must be 5.0 or higher. The Unlimited 4-Minute Free is not to be included as a flight.
- (b) Each applicant desiring a STARS award will complete an application and submit it, along with an official copy of all raw grades for all contest flights, to the Chief Judge of the category for validation and signature. Send approved application to the Achievement Awards Chairperson noted on the application.
- (c) Contest flights may not be used to qualify for the SMOOTH award.
- (d) Intermediate, Advanced and Unlimited must fly at least two flights to qualify for a STARS Award. A contest that is able to fly only one flight for these categories cannot qualify a competitor for a STARS award. All applicants must fly and qualify in all flights available at a contest in their category.

6. CERTIFICATES AND PATCHES

- (a) A certificate suitable for framing will be issued for each award certified by the Achievement Awards Chairperson.
- (b) Distinctive patches will be available for purchase by applicant.
- (c) A unique ALL-FIVE patch will be awarded free upon earning all five SMOOTH awards (all in either the power or glider category), and a unique ALL-TEN patch will be awarded free to applicants earning all five SMOOTH and all five STARS awards (both awards within the same, that is, power or glider, category). The names of the ALL-TEN recipients for the previous 12 months will be announced each year at the U.S. National Aerobatic Championships by the President of IAC.
- (d) A permanent list of all applicants and recipients of both SMOOTH and STARS awards will be maintained by the Achievement Awards Chairperson.
- (e) Applications for Achievement Awards can be obtained from the Achievement Awards Chairperson, from the Registrar at a sanctioned contest, or downloaded from the IAC web site, www.iac.org.



7. CATEGORY FIGURE LISTS - POWER

PRIMARY

FIGURE DESCRIPTION	ARESTI CATALOGUE #
(1) Spin (one turn)	1.1.6.3 + 9.11.1.4
(2) Loop	7.4.1.1
(3) Slow Roll	1.1.1.1 + 9.1.3.4
(4) 270-deg. Turn	2.3.1.1

SPORTSMAN

FIGURE DESCRIPTION	ARESTI CATALOGUE #
(1) Spin (one turn)	1.1.6.3 + 9.11.1.4
(2) Loop	7.4.1.1
(3) Hammerhead	5.2.1.1
(4) ½ loop up + ½ roll (Immelmann)	7.2.2.1 + 9.1.3.2
(5) Humpty Bump	8.4.1.1
(6) Reverse Half Cuban 8	8.5.2.1 + 9.1.2.2
(7) One-half Cuban 8	8.5.6.1 + 9.1.4.2
(8) Slow Roll	1.1.1.1 + 9.1.3.4

INTERMEDIATE

FIGURE DESCRIPTION	ARESTI CATALOGUE #
(1) Spin (1 ¼ turn)	1.1.6.3 + 9.11.1.5
(2) Hammerhead with ¼ rolls up and down	5.2.1.1 + 9.1.1.1 + 9.1.5.1
(3) Half Cuban 8	8.5.6.1 + 9.1.4.2
(4) Slow Roll on 45° up line	1.1.2.1 + 9.1.2.4
(5) Snap Roll on 45° down line	1.1.2.3 + 9.9.4.4
(6) ½ loop up + ½ roll (Immelmann)	7.2.2.1 + 9.1.3.2
(7) 4 Point Hesitation Roll	1.1.1.1 + 9.4.3.4
(8) Reverse Shark's Tooth	1.2.3.1 + 9.1.2.2
(9) Square Loop	7.4.3.1



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ADVANCED

FIGURE DESCRIPTION

- (1) Inverted spin (one turn)
- (2) Loop with Snap Roll
- (3) Half Cuban 8, 2 of 4 down
- (4) $\frac{3}{4}$ Snap Roll on vertical line down
- (5) Outside Loop
- (6) Snap Roll on 45° up line
- (7) 90-deg. rolling circle, 1 to outside
- (8) Opposite Half-Rolls
- (9) Cuban 8 (inside-outside)
- (10) 360° rolling circle, 4 to inside
- (11) Humpty-Bump, $\frac{1}{2}$ roll up
- (12) 8-point Roll

ARESTI CATALOGUE

- 1.1.7.4 + 9.12.1.4
- 7.4.1.1 + 9.9.3.4
- 8.5.6.1 + 9.4.4.2
- 1.1.7.4 + 9.9.5.3
- 7.4.1.2
- 1.1.2.1 + 9.9.2.4
- 2.1.3.3
- 1.1.1.1 + 9.1.3.2 + 9.1.3.2
- 7.8.1.1
- 2.4.7.1
- 8.4.1.1 + 9.1.1.2
- 1.1.1.1 + 9.8.3.4

UNLIMITED

FIGURE DESCRIPTION

- (1) Inverted spin, inverted exit
- (2) 4 of 8 point roll from inverted
- (3) $\frac{3}{4}$ Roll on vertical up line
- (4) 8-sided Loop
- (5) Outside Loop
- (6) Snap Roll on vertical up line
- (7) Outside Snap Roll on 45° up line
- (8) Hammerhead with inverted entry, $\frac{1}{2}$ Roll up
- (9) Tailslide, wheels down
- (10) Cuban 8, double outside
- (11) 360° rolling circle, 4 Rolls, inside/outside
- (12) Full Roll, $\frac{1}{2}$ Loop, 3 of 2-point Roll

ARESTI CATALOGUE

- 1.1.6.4 + 9.12.1.4
- 1.1.1.4 + 9.8.3.2
- 1.1.6.1 + 9.1.1.3
- 7.4.6.4
- 7.4.1.2
- 1.1.6.1 + 9.9.1.4
- 1.1.2.1 + 9.10.7.4
- 5.2.1.4 + 9.1.1.2
- 6.2.1.1
- 7.8.3.2 + 9.1.4.2
- 2.4.8.1
- 9.1.3.4 + 7.2.2.1 + 9.2.3.6



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8. CATEGORY FIGURE LISTS - GLIDER



PRIMARY

FIGURE DESCRIPTION

- (1) Spin (one turn)
- (2) Loop
- (3) Wingover

ARESTI CATALOGUE

1.1.6.3 + 9.11.1.4
7.4.1.1
0.0

SPORTSMAN

FIGURE DESCRIPTION

- (1) Spin (one turn)
- (2) Loop
- (3) Slow Roll
- (4) Half Cuban-8
- (5) Split-S

ARESTI CATALOGUE

1.1.6.3 + 9.11.1.4
7.4.1.1
1.1.1.1 + 9.1.3.4
8.5.6.1 + 9.1.4.2
7.2.3.3 + 9.1.3.2

INTERMEDIATE

FIGURE DESCRIPTION

- (1) Spin (1 ¼ turn)
- (2) Quarter-Clover
- (3) 2 Point Hesitation Roll
- (4) Hammerhead
- (5) Immelmann

ARESTI CATALOGUE

1.1.6.3 + 9.11.1.5
0.1
1.1.1.1 + 9.2.3.4
5.2.1.1
7.2.2.1 + 9.1.3.4

ADVANCED

FIGURE DESCRIPTION

- (1) Spin (1 ½ turn)
- (2) 4 Point Hesitation Roll
- (3) Hammerhead, ¼ roll down
- (4) 90-degree turn, one roll to inside
- (5) Tailslide, Canopy Down
- (6) Goldfish, inverted entry

ARESTI CATALOGUE

1.1.6.3 + 9.11.1.6
1.1.1.1 + 9.4.3.4
5.2.1.1 + 9.1.5.1
2.1.3.1
6.2.2.1
7.3.1.2

UNLIMITED

FIGURE DESCRIPTION

- (1) Inverted spin, inverted exit
- (2) Reverse Half Cuban
- (3) Hammerhead, ¼ roll up, push out
- (4) Inside Snap Roll on 45-down line
- (5) 90-degree turn, one roll to outside
- (6) Tailslide, Canopy Up
- (7) Outside Loop, Down
- (8) Half-Cuban, outside ½ snap roll

ARESTI CATALOGUE

1.1.6.4 + 9.12.1.4
8.5.2.1 + 9.1.2.2
5.2.1.3 + 9.1.1.1
1.1.2.3 + 9.9.4.4
2.1.3.3
6.2.1.1
7.4.1.3
8.5.6.1 + 9.10.4.2



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