



EXPERIMENTAL AIRCRAFT ASSOCIATION

OFFICIAL

EAA JUDGING

STANDARDS MANUAL



FOREWORD

The EAA Official Judging Standards is compiled by the EAA Judging Standards Committee. The EAA Official Judging Standards is the basis of judging at EAA AirVenture Oshkosh and other major fly-ins and provides judges and the exhibitor/competitors in each class the rules and criteria, which are used in evaluating the aircraft.

The purpose of the EAA Official Judging Standards is to provide uniformity and continuity of judging standards to all concerned especially the judges, fly-in directors, and participants of all major events across the United States and around the world. These EAA Official Judging Standards are continuously monitored and updated to reflect changes as they evolve in all these fields, and changes may be implemented before they are published. EAA Members are encouraged to submit their comments and recommendations per the procedures outlined in the EAA Judging Policy published at the end of this Forward. We look forward to responding to the comments made by EAA members who would like to improve the Judging Standards.

The Judging Standards Committee represents the EAA Board of Directors and President in all aspects related to standards and judging at the annual International EAA AirVenture Fly-In and Convention held annually on Wittman Field, Oshkosh, Wisconsin. **It is the intent that this manual serves as the standard for judging at major EAA regional and local events.**

Applicable to the annual EAA Fly-In, with the exception of the Homebuilt Aircraft section, the Judging Chairmen of the different judging disciplines will be chosen by the Boards of Directors of the respective Divisions (where applicable) or by the Advisory Councils, with the approval of the Judging Standards Committee. The Judging Chairmen of the Homebuilt Aircraft will be chosen by the Judging Standards Committee with the approval of the Chairman of the EAA AirVenture Fly-In.

This is a living document. Changes and revisions, designed by Judges, representing EAA and all EAA Divisions, and approved by the Judging Standards Committee, will be implemented as necessary even before the publication of those changes in the new revisions of the manual. Every effort will be made to update this publication online as soon as possible after a revision has been made.

Bob Reece, EAA #82844
Chairman, EAA Judging Standards Committee
Chief Judge, EAA AirVenture

AWARDS

The EAA awards program highlights the accomplishments of EAA members across the wide spectrum of aviation interests that EAA encompasses. EAA's awards are recognized worldwide as the most prestigious for aircraft construction and restoration.

During EAA AirVenture Oshkosh, we encourage all members to honor the achievements of their peers at the various awards ceremonies. If you are an aircraft builder or restorer, we encourage you to attend the awards ceremony for your interest area, to receive your award and the applause of your fellow EAA members. All EAA members are encouraged to attend the awards ceremonies when they can learn more about the judging system, and recognize the outstanding achievements of their fellow members.

For information on the exact time and place of the awards for your area of interest, please see EAA's annual convention newspaper, *AirVenture Today*. We hope to see you there!

Ed Wischmeyer, EAA #18879
Awards Committee Chairman, EAA AirVenture

THE JUDGES

The judging of contest aircraft is a difficult, demanding, rewarding, and sometimes-thankless job. Each year the quality of aircraft presented at AirVenture is better than the last, and the burden of choosing among them is greater. The primary effort is to be objective and as professional as possible in evaluating the aircraft. The resulting decisions represent the consensus of a number of judges who have devoted considerable time and effort and who are aware of the importance of their decisions to the exhibitors.

Judging is a voluntary activity with the only rewards being the satisfaction of a meaningful job well done. The judges not only donate their time and considerable effort, but they are also knowledgeable and bring a high degree of professionalism. They are to be commended for the dedication that they all bring to this effort as they honor their fellow EAA members through their volunteer services.

The decisions of the judges are final. In all categories, there will be no tied score. The chief judge has the ability to cast a tie-breaking vote. This is the only vote the chief judge has in the scoring system.

GENERAL

Any aircraft that has won an award at AirVenture, will not be eligible for the same or a lesser award in subsequent years. In any given year, all aircraft are eligible to be judged in only one division; any aircraft that has been judged in any of the divisions is ineligible to be judged in any other of the divisions. In order to be judged, the aircraft must be parked in the appropriate area. Any aircraft that has won an award in any division will in subsequent years be ineligible to be judged in any other division. In every category (unless otherwise excepted) in order to be eligible to be judged, the aircraft must either have flown to the convention or be observed to fly during the convention. Scale Replicas (a replica that is less than full size) will be regarded as Homebuilt, with certain exceptions as noted.

EAA STATEMENT OF AIRCRAFT JUDGING POLICY

Since its inception over 50 years ago, EAA has chosen to underscore the outstanding achievements of its members in a variety of ways, including the presentation of awards to those aircraft that exhibit a high degree of craftsmanship and ingenuity in their construction or restoration.

EAA is grateful for the work done on a year-round basis by the volunteer leadership of the EAA Judging community, and wish to make it clear to members and other interested parties that the implementation and execution of the Judging Standards is the responsibility of the EAA volunteer judging community.

EAA Headquarters staff is involved in the logistic and documentation aspects of the EAA Judging Standards, and is in no way involved in the selection of those aircraft deemed by the judges as worthy of an award. Awards selection is made by the volunteer judges, and their decision in these matters is final.

EAA reserves the right to add to or subtract from the awards lists, in consultation with the chairman and the members of the Judging Standards committee.

Major events which have sponsorship agreements with EAA, and local chapter events, are expected, by virtue of their signed agreement or their "good standing" status, to agree to utilize the EAA Judging Standards Manual in its entirety, with no modification, including but not limited to the awards to be presented (a shorter or consolidated list of award types in type categories is permitted). Also, no additional awards can be added to this list without the concurrence of the Committee. Requests for changes and any subsequent approval for such a change shall be made in accordance with the procedure outlined below.

The Judging Standards Committee is composed of the following members:

Chairman, EAA Judging Standards Committee

Chairman, Homebuilt Aircraft Judging

Chairman, Vintage Aircraft Judging

Chairman, Warbirds of America Judging

Chairman, Rotorcraft Judging

Chairman, Lightplane/Ultralight Judging

Chairman, Seaplane Judging

Requested changes to the EAA Judging standards manual will be reviewed by the Judging Standards Committee on a regular basis. Requests, in writing, are to be mailed to this address:

Experimental Aircraft Association, Inc.
Tom Poberezny, President
RE: Judging Program Change Request
PO Box 3086
Oshkosh, WI 54903-3086

E-Mail: EAAJudgingChangesRequest@eaa.org

Acknowledgement of receipt by EAA Headquarters of a request for a change to the standards will be made via regular mail. Both E-mail and regular mail requests shall include a full mailing address and e-mail address, if possible, and should include a clear description of the change(s) requested, and justification for such a change.

Unless urgent action is needed, the committee will review requests for changes during the fall/winter season. The Judging Standards committee will review each request and make a recommendation to maintain or revise the current standards. Meetings can be face-to-face or electronic (e-mail, web-based audio/video) in format.

A written report detailing the current members of the committee, meeting attendance and disposition of the requests will be created by the chairman of the Judging Standards Committee, and will be forwarded to the President on an annual basis, or more often if deemed necessary by the chairman.

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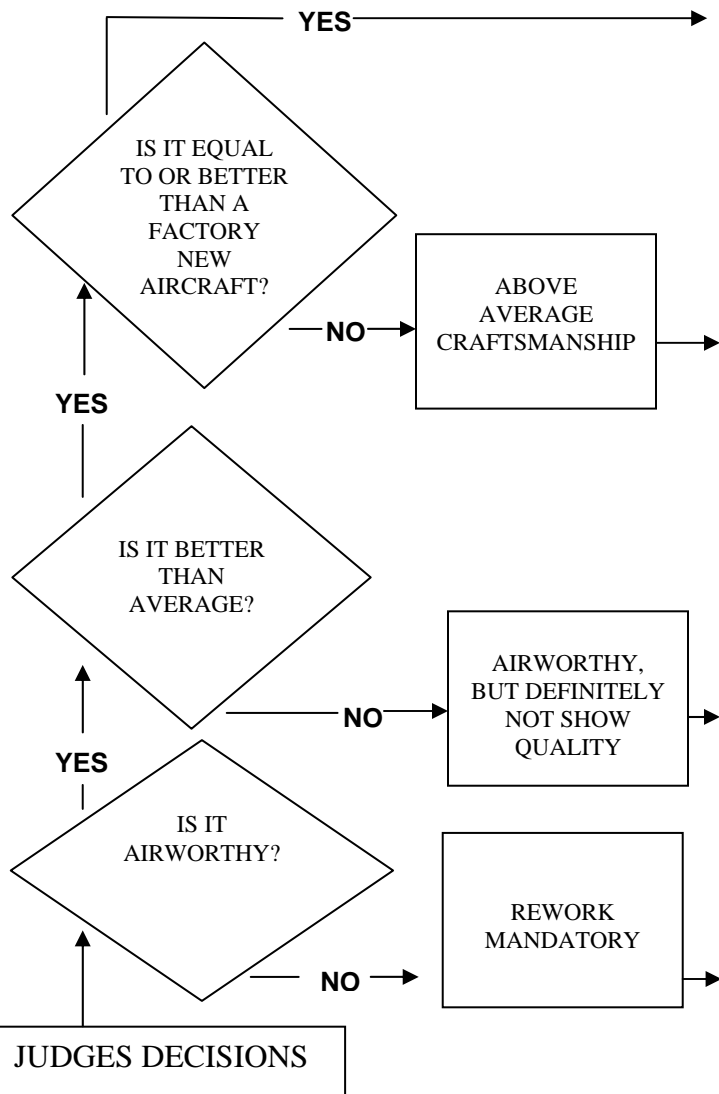
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AIRCRAFT JUDGING SCORING DECISION TREE



JUDGES IMPRESSION	TYPICAL OBSERVATIONS	SCORE
PERFECT, IMPOSSIBLE TO DO BETTER	Flawless in all respects	10
EXCELLENT, VERY MINOR FLAWS	Outstanding workmanship. Exceptional attention to detail. Flaws difficult to detect.	9
VERY GOOD. MINOR FLAWS	Very fine workmanship. Flaws apparent to the trained eye, but not distracting.	8
GOOD. SHOWS PRIDE IN WORKMANSHIP	Very good attention to detail. Shows high standards of craftsmanship and polish. Strong show quality.	7
SOLIDLY ABOVE AVERAGE. LOOKS GOOD.	Very solid and consistent. Shows attention to detail. Minor flaws are easy to detect.	6
SLIGHTLY ABOVE AVERAGE	Exhibits consistency, but could easily be improved with only slightly more work and minimal attention to detail.	5
AVERAGE	Generally meets the aeronautical standards with some inconsistencies. Slightly under or over built in some areas, little finesse or detail.	4
FUNCTIONAL	Builder made no obvious attempt to do work beyond that necessary to do the job.	3
CRUDE	Workmanship skills totally lacking. Work is questionably functional with little regard to aeronautical standard.	2
VERY CRUDE	Airworthiness marginally acceptable. Not done to aeronautical standard or equivalent.	1
MAJOR DEFICIENCY	Deficiency is a safety of flight item with potential for catastrophic flight failure.	0



HOMEBUILT AIRCRAFT

I. REQUIREMENTS FOR SELECTION OF JUDGES

Judges will be selected by the Chairman of Homebuilt Aircraft Judging with the approval of the Chairman of the Judging Standards Committee. All Judges must be a current member in good standing of the Experimental Aircraft Association. The chairman shall invite only those individuals to act as judges who possess the qualifications detailed below:

- A. The individual must be a current member in good standing of the Experimental Aircraft Association.
- B. The individual must possess a sound background and knowledge of aircraft construction techniques, workmanship requirements, safety requirements, and should possess a sound background in amateur built aircraft construction.
- C. The following qualifications may be utilized to determine if an individual meets the requirements of paragraph B above:
 1. Aircraft and Powerplant Mechanic License
 2. Aircraft Inspector License
 3. EAA Technical Counselor
 4. Experience gained by construction of Homebuilt aircraft
 5. Experience gained by significant work in metal, wood and composite construction and restoration of aircraft.
- D. The individual must possess the personal dedication to pursue the task of judging diligently to a conclusion with a minimum of supervision.
- E. Judges shall be selected from as many geographical areas of the country as possible to provide a broad experience base. Qualified foreign EAA members may also serve as judges.
- F. The judges must remember that they are representatives of EAA and conduct themselves accordingly at all times.

II. JUDGING OPERATIONAL FORMAT

The following represents the general operational format of the Homebuilt judging.

- A. A meeting of the Homebuilt Judging Committee will be convened in a planning session at 9:00 AM or other designated time as appropriate each day of the fly-in to discuss operating practices, provide instructions, review ratings, and to vote on the awards.
- B. Judging activities will commence immediately following the daily planning meeting.

- C. Judging will start no later than the morning of the second full day of the fly-in and continue until approximately noon of the day before the Homebuilt awards are to be presented. At that time the final decisions are made so as to provide time for the Awards Chairman to have the appropriate trophies prepared.
- D. Each judge will be provided with an identifying badge, which should be displayed while acting in a judging capacity.
- E. Judges will operate in teams of two or three whenever possible.
- F. Judges will use Forms A and B as described in the Judging Practices section of this handbook. In the event electronic judging is utilized, the pre-programmed portable computers and software will be employed for judging.
- G. Rating forms shall be turned in by 4:00 PM or as directed by the Chief Judge each day.
- H. To be eligible for an award an aircraft must be judged by no less than three judges during AirVenture. Fewer judges may be required for other EAA Fly-Ins.
- I. Aircraft selected for consideration for awards shall be determined by averaging all the judges' individual scores for that aircraft.
- J. Final awards shall be determined by majority vote of the judges. The Chairman of Homebuilt Judging will vote only to break a tie. In general the judging scores will determine the awards, with the exception that the judges will have the option of final discretion in special circumstances.
- K. The decisions of the judges are final.
- L. In all categories, there will be no tied score. The chief judge has the ability to cast a tie-breaking vote. This is the only vote the chief judge has in the scoring system.

III. AIRCRAFT TO BE JUDGED

A. Registration

Homebuilt aircraft will be divided into two categories: Plans-built and Kit Built. Only aircraft that have been registered as Experimental, Plans-built or Kit Built at Aircraft Registration will be judged. At the time the aircraft is registered, the owner-builder will indicate on the registration form if he/she wishes to have the aircraft judged. The owner/operator must be a member in good standing of the Experimental Aircraft Association in order to be judged and possibly receive an award. If the owner indicates that he/she wishes to have his/her aircraft judged, he/she will be given a "Please Judge Me" sticker to affix to the propeller card issued by Aircraft Registration. The sticker has three boxes for the judges to initial when they have completed judging the aircraft. As judges tour the display areas it is only necessary to look for the "Judge Me" sticker to determine if an aircraft requires additional judging.

B. Categories

1. Plans-built

Aircraft that are constructed without the aid of purchased major subassemblies, or aircraft of original design will be considered Plans-built. The intent is for the builder to have learned a variety of skills and to have constructed the aircraft from scratch. The aircraft must be registered by the FAA in the Experimental Amateur Built Category, FAR 21.191(g).

2. Kit Built

Aircraft built from kits listed in the FAA's List of Amateur-Built Aircraft Kits posted on their website at:

http://www.faa.gov/aircraft/gen_av/ultralights/amateur_built/kits/

will ordinarily be placed in the Kit Built Category. Builders who do not have access to the internet can write for a copy of the list from the FAA by sending their request to:

Federal Aviation Administration
Amateur-Built Kit List Manager,

Airworthiness Certification Branch, AIR-230
800 Independence Ave, SW Suite 815
Washington D.C. 20591

Other aircraft that are intended by the manufacturer to be Kit Built aircraft and have not yet been added to the list published by the FAA but clearly comply with the intent of the FAA's list will be considered in the Kit Built category. If a builder of what would ordinarily be considered to be a Kit Built plane has in fact scratch built it from the plans, he/she may elect to have it considered a Plans-built aircraft. The aircraft must be certified by the FAA in the Experimental Amateur Built Category, FAR 21.191(g).

3. **Classic Homebuilt**

Aircraft constructed under Experimental Amateur Built Category FAR 21.191(g) and twenty years or more old on the day before the convention starts are eligible to be judged in the Classic Homebuilt Category. The aircraft may be restored or continuously maintained. Aircraft will be judged for workmanship and authenticity. Major modifications such as changing wing configuration or engine from a radial to horizontally opposed will disqualify the aircraft from judging under this category. The aircraft should be in its basic original configuration. Changes to maintain the operational capability are allowed such as radio upgrades and engine modifications. It is not required that the original owner/builder still own and maintain the aircraft. The aircraft may be maintained professionally per current FARs. However, all other things being equal, preference would be given to the aircraft that is still owned and maintained by the original owner/builder or a close relative.

C. **Flight Requirements**

To be eligible to receive an award the following criteria must be met.

1. The aircraft must meet the FAA minimum requirements for the Experimental Amateur Built Category.
2. The FAA operating limitations restricting flight to a test flight area must have been removed.
3. The aircraft shall have flown to EAA AirVenture or it must be flown during EAA AirVenture.
4. The FAA certification documents must be in order and available for inspection by the judges.

D. **Owner Construction Requirements**

For an aircraft to be classed by the FAA as Amateur Built, 51% of its construction must have been accomplished by the owner/builder. In direct relation to this requirement, **the aircraft will be judged for quality of workmanship, originality of design or design innovation, quality of finish and unique safety provisions**, all of which relate to the talents and approach of the builder. It should be further recognized that the Experimental Aircraft Association has promoted the learning of all types of skills associated with aircraft construction via assistance to the builder by EAA Technical Counselors and other individuals knowledgeable of those techniques. The judges shall keep in mind that most homebuilt aircraft have been constructed by more than one person with the advice or assistance of others. This practice is consistent with the learning process fostered by the EAA. **The judges shall be alert for those aircraft, which have not been built by the exhibitor. These aircraft do not represent an accomplishment of the owner. The owner is encouraged to document the building process and to bring that documentation including especially photos to EAA AirVenture for the benefit of the judges. Without such documentation, points may be deducted particularly in comparison with other aircraft with which there is conclusive documentation of the owner's participation in the major part of the construction.**

E. **Replica Aircraft**

Owner/Exhibitors of reduced scale Warbird replicas are eligible to be judged in the Homebuilt Category, if the owner so desires, and if the aircraft is parked in the Homebuilt area. Full-scale Reproduction aircraft will be judged in the appropriate area, e.g. Vintage, or Warbird.

F. **Seaplanes**

Homebuilt seaplanes and amphibians which choose to be regarded as Homebuilt, and are parked in the Homebuilt area will be judged within their respective categories, i.e. Kit built or Plans-built and will be subject to the same judging criteria.

- G. Change of ownership does not qualify an aircraft to be judged for an award previously won by a past owner for the same aircraft. However, if the aircraft was significantly improved and additional documented restoration work was accomplished, then it could be considered again for judging. In all cases of eligibility, etc., a vote by the majority of judges will be used to decide.

IV. JUDGING PRACTICES

A. **Scoring System**

EAA uses an open judging system in which all aircraft within each of the two major categories referred to above are judged against each other rather than by subtypes such as construction (wood, composite, metal, etc.) or by configuration (biplane, high/low wing, open/closed cockpit, etc.). This facilitates utilization of a standardized numerical judging system.

B. **Impartiality**

It is of prime importance that each aircraft presented for judging be treated in an unbiased manner. Judges who consider their review of a particular aircraft as biased, either due to personal acquaintance with the builder, or personal knowledge of its construction may excuse themselves from judging that aircraft.

C. **Request for Detailed Review**

Each aircraft shall be judged on all features that are visible. Judges may request the owner to open the cockpit, engine cowl or other access panels to view internal appointments of structure. Such a request should be made by at least three judges in order to prevent repeated requests and inconvenience to the owner. Refusal by the owner to do so will leave the judges to their own discretion regarding these areas, and may result in point deductions.

D. **Technique**

Each judge may develop his/her own technique for judging. The technique of judging is of small consequence so long as the objectives of the judging program are met.

E. **Aircraft General Condition**

Most owners are proud of their aircraft and spend considerable effort to remove dust, oil and exhaust stains from their aircraft. An aircraft, which is obviously not cared for, should be downgraded. Aircraft are intended to fly and allowances will be made for discoloration and the inevitable minor traces of flight. An airplane need not be absolutely new in order to compete.

F. **Rating Forms**

Two forms are provided for use in judging. These forms may be provided in hard copy forms or in electronic form using hand-held portable computers. Form A shall be used to judge those aircraft, which the judge determines to be in contention for an award. Form B shall be used to list those aircraft determined to be average or below and not in contention for an award.

G. **Approach**

It is recommended that the judge first accomplish a general walk-around review of the aircraft. If the owner is present, the judge should introduce him/herself and inform the owner that his aircraft is being judged. If the owner informs the judge that he does not wish his aircraft judged, enter "not judged by owner's request" on the Form B with the aircraft registration number.

H. **Judging Criteria**

The ratings given by the respective judges in completing Form A will depend upon their judgment of the factors as they apply to the appropriate areas.

1. **Safety** provisions and **safety of flight** items (seat belts, shoulder harness including placement, roll over structures, fire control systems, redundant systems, etc.).
2. Use of standard aircraft mechanical practice.
3. Quality of workmanship.
4. Innovation and improvements.
5. Evidence of aforethought and planning.
6. Neatness and consistency.
7. Utilization and placement of instruments and controls.
8. Ease of access for maintenance and preflight.
9. Fit and finish.
10. Presentation including documentation of the building process.
11. Compliance with the FARs and FAA certification is an absolute requirement for consideration, and no score will be given in this category.

I. Judge's Remarks

Judges are encouraged to place comments in the "remarks" section of the judging form for any unique or special items noted during judging which are deemed important to the understanding of his rating. These remarks will be available in the judges meetings for the purpose of remembering and pointing out specific items that may have a bearing on the overall scoring.

J. Awards

The Homebuilt judging will judge for only EAA awards and those awards, which have been approved by the EAA Judging Standards Committee.

V. THE EAA SPONSORED HOMEBUILT AWARDS ARE:

- Grand Champion Plans-built Gold Lindy
- Grand Champion Kit Built..... Gold Lindy
- Reserve Grand Champion Plans-built..... Silver Lindy
- Reserve Grand Champion Kit Built Silver Lindy
- Champion Homebuilt (Fourteen Awards) Bronze Lindy
- Outstanding Workmanship (Ten Awards) Plaques

The last two categories of awards will be divided roughly equally between the two subcategories of Homebuilts, the variations depending on the scores of the aircraft, and numbers of aircraft in the respective categories. These numbers may be modified at the discretion of the Judging Standards Committee.

- Paul Poberezny Founders Award for the best Classic Homebuilt Aircraft.
- Best School Flight Project
- Best Chapter Project
- The Stan Dzik Memorial Award for Outstanding Design contribution.
This award will be determined outside the normal judging guidelines detailed in this document. Nominations will be made by the individual judges for consideration of the Homebuilt Judging Committee.

Special Awards:

With the approval of the EAA Judging Standards Committee and the Awards Committee special awards may be created to recognize either aircraft, which have special features or characteristics, or individuals whose homebuilt efforts exemplify the spirit of the EAA.

HOMEBUILT JUDGING	FORM A
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REGISTRATION MARKING _____ EAA # _____ <i>(Required)</i> OWNER'S NAME _____ ADDRESS _____ E-MAIL ADDRESS _____	DESIGN NAME _____ CATEGORY: PLANS _____ KITS _____ CLASSIC _____ REPLICA _____ ENGINE MANUFACTURE _____ HP RATING _____
--	---

- | | POINTS |
|--|---------------|
| 1. OVERALL APPEARANCE
Aesthetic appeal or presence, neatness and consistency | 1 – 10 _____ |
| 2. FUSELAGE
Quality of workmanship, sound construction practice, innovation, improvements, access for maintenance | 1 – 10 _____ |
| 3. MAIN LIFTING SURFACES
Quality of workmanship, fit & finish, sound construction practice, innovation and improvements | 1 – 10 _____ |
| 4. EMPENNAGE/PITCH & YAW SURFACES
Quality of workmanship, sound construction practices, innovation and improvements, neatness, consistency, fit and finish | 1 – 10 _____ |
| 5. LANDING GEAR AND BRAKES
Quality of workmanship, sound construction practice, innovation, improvements, safety provisions | 1 – 10 _____ |
| 6. COCKPIT OR CABIN
Utilization of instruments and controls, evidence of forethought and planning, safety provisions, neatness, consistency, innovations and improvements, workmanship | 1 – 10 _____ |
| 7. POWER PLANT AND DROP
Safety provisions, sound practice, workmanship, access for maintenance and preflight, innovations, improvements | 1 – 10 _____ |
| 8. FINISH
Consistency and attention to detail | 1 – 10 _____ |
| 9. EXECUTION AND INNOVATION
Difficulty, theme, judges' discretion | 1 – 10 _____ |
| 10. DOCUMENTATION OF COMPLIANCE WITH FARs Y____ N____ | |

TOTAL _____

- POINTS**
- 10 PERFECT
 - 9 EXCELLENT
 - 8 VERY GOOD
 - 7 GOOD
 - 6 DEFINITELY ABOVE AVERAGE
 - 5 SLIGHTLY ABOVE AVERAGE
 - 4 AVERAGE
 - 3 FUNCTIONAL
 - 2 CRUDE
 - 1 UNAIROWORTHY

JUDGE'S REMARKS _____

_____ **Judge No.**

NOTES

NOTES

SUPPORT PROVIDED BY



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EXPERIMENTAL AIRCRAFT ASSOCIATION

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