

# **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 Regional Airport, Oshkosh, Wisconsin. It is the intent that this manual serves as the standard for judging at EAA 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 though 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 it's 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 it's 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:

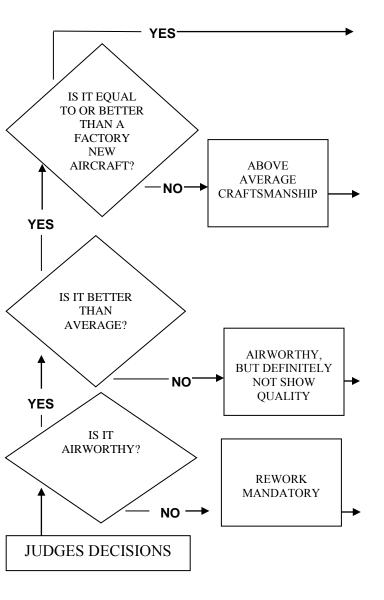
Experimental Aircraft Association, Inc. Attn: Chapters for Judging Standards Committee PO Box 3086 Oshkosh, WI 54903-3086

Requests shall include a full mailing address and e-mail address 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.

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# AIRCRAFT JUDGING TRAINING FLOWCHART



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 (<a href="http://www.faa.gov/aircraft/gen\_av/ultralights/amateur\_built/kits/">http://www.faa.gov/aircraft/gen\_av/ultralights/amateur\_built/kits/</a>) will ordinarily be placed in the Kit Built Category.

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.
- The FAA operating limitations restricting flight to a test flight area must have been removed.
- 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, <u>and</u> 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, <u>and</u> 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 <u>not</u> qualify an aircraft to be judged for an award previously won by a past owner for the same aircraft. However, if the aircraft was <u>significantly</u> 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:

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.
- 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.

H	OMEBUILT JUDGING FOI	RM A	
RE	GISTRATION MARKING	DESIGN NAME	
EA	<b>A</b> #(Required)	CATEGORY:	PLANS
	(Required)		KITS
ov	VNER'S NAME	_	CLASSIC
AD	DRESS	_	
			REPLICA
		_ ENGINE	MANUFACTURE
E-I	MAIL ADDRESS	_ HP RATI	NG
1.	OVERALL APPEARANCE		POINTS
1.	Aesthetic appeal or presence, neatness and consistency	•••••	1 – 10
2.	FUSELAGEQuality of workmanship, sound construction practice, innovation, impro		
3.	MAIN LIFTING SURFACES		
4.	EMPENNAGE/PITCH & YAW SURFACES		
5.	LANDING GEAR AND BRAKESQuality of workmanship, sound construction practice, innovation, impro		
6.	COCKPIT OR CABIN	nning, safety provisio	1 – 10
7.	POWER PLANT AND DROP Safety provisions, sound practice, workmanship, access for maintenance		
8.	FINISHConsistency and attention to detail		1 – 10
9.	EXECUTION AND INNOVATION. Difficulty, theme, judges' discretion		1 – 10
10.	DOCUMENTATION OF COMPLIANCE WITH FARS	Y N	mon.v
1 9 8 7 6 5 4	INTS 0 PERFECT EXCELLENT VERY GOOD GOOD DEFINITELY ABOVE AVERAGE SLIGHTLY ABOVE AVERAGE AVERAGE FUNCTIONAL	JUDGE'S REMA	ARKS
2	CRUDE UNAIRWORTHY		Judge No.

	B SHEET	
N #	Owners Name	Aircraft Type
		DATE
	JUDGES NUMBER	



# VINTAGE AIRCRAFT ANTIQUE, CLASSIC, AND CONTEMPORARY

#### I. FORWARD

The purpose of the Vintage Aircraft Association section of the EAA Official Judging Standards is to establish the basis for viable restoration, maintenance, and construction standards against which Vintage aircraft can be judged. The philosophy of these standards is to meet two primary criteria. One is to have a simple and comprehensive system and the second is to provide a framework for fair and consistent competition without regard to ownership, except that the owner shall be a member in good standing of the EAA.

The VAA Chief Judge and the EAA Judging Standards Committee has prepared and/or reviewed these criteria. It should be noted that the concept that reflects the opinion of those responsible for developing these guidelines is that of **authenticity**. These standards are established to encourage members to restore and maintain Vintage airplanes to reflect a "factory fresh" condition. Deviations from originality will result in negative judging points with the exception of safety items and for aircraft. qualifying for Customized Airplane Awards. An important part of these established guidelines pertains to documentation of authenticity of the subject aircraft. The exhibitor should provide pictures, letters, factory literature, specifications and other information to assist the judges in determining authenticity.

Customized Airplane Awards. The Contemporary category judging group of VAA has chosen to recognize aircraft which have been updated to be used as personal transportation aircraft while retaining the spirit of the EAA Vintage Aircraft Association. These aircraft may have been modified with newer engines, propellers, avionics and other modern features to improve speed, reliability and safety, and are to have been manufactured January 1, 1956 thru December 31, 1970. The awards are a Gold, Silver and Bronze Lindy. All other judging criteria will remain the same as other categories.

The exhibitor may assist in the aircraft inspection process. Judges will not remove panels or inspection plates without the assistance of the owner or their representatives.

Decisions of the judges are considered to be final. There cannot be tie scores. In case of an equal score the category Chairman will cast a tie breaking vote which is the only circumstance for which they will become directly involved in the scoring.

Opening and closing times for judging will be posted at the Vintage Red Barn information desk and in various publications prior to and during AirVenture.

#### II. VINTAGE CATEGORIES

#### A. Antique Aircraft

Aircraft constructed by the original manufacturer, or his licensee, on or before August 31, 1945, with the exception of certain Pre-World War II aircraft models, which had only a small post-war production, shall be defined as Antique Aircraft. Examples: Beechcraft Staggerwing, Fairchild 24, and Monocoupe.

#### **B. Classic Aircraft**

Aircraft constructed by the original manufacturer, or his licensee, on or after September 1, 1945, up to and including December 31, 1955.

#### C. Contemporary Aircraft

Aircraft constructed by the original manufacturer, or its licensee, on or after January 1, 1956, up to and including December 31, 1970.

#### III. DEFINITIONS

#### A. Continuously Maintained Aircraft

Aircraft with proof of construction by the original manufacturer, or his licensee, which have received periodic maintenance, repair, recover, and/or replacement of parts, but which have never been completely disassembled and rebuilt or remanufactured.

#### B. Restored Aircraft

Aircraft with proof of construction by the original manufacturer, or his licensee, that have been disassembled into component parts, which were then either, replaced, refurbished, or re-manufactured to be equal to, or as good as, new condition.

#### C. Customized Aircraft

Aircraft with proof of construction by the original manufacturer, or licensee, which have been obviously modified from its original appearance. Such modifications could include airframe structural change, paint schemes, interior and upholstery, instrument panel, engine and cowling or other changes from original. Deducts for non-authenticity do not apply to Customized Aircraft.

#### D. Replica Aircraft

Aircraft constructed exactly to the original manufacturer's plans, full size in scale, but not constructed by the original manufacturer or his licensee.

#### IV. SELECTION OF JUDGES

Prospective judges are to be recommended by the Chairmen of the respective Vintage categories and will be subject to approval by the VAA Chief Judge. An application form is included for this purpose.

#### V. QUALIFICATIONS OF JUDGES

A judge must be a current member in good standing of the EAA and of the EAA Vintage Aircraft Association. (Exceptions can be made in special circumstances subject to the approval of the EAA Judging Standards Committee). Judges must have a thorough knowledge of the aircraft type and vintage to be judged. This knowledge should be extensive and obtained from years of actual experience while flying and/or maintaining vintage aircraft. Qualifications for judges may also be acquired by conducting historical research or by actual restoration experience. Judges presenting aircraft for judging will be ineligible to serve as a judge in the Vintage category of their exhibited aircraft for the year in which it is being judged.

#### VI. GUIDELINES FOR JUDGES

Judges will be guided by the following general policy. Award winning aircraft should be either in factory fresh condition without restoration, or have been meticulously restored to such condition. For restored aircraft, the quality of workmanship and authenticity of the

restoration are the main issues. Therefore the best judged aircraft are to be the ones that most closely approach factory fresh condition. Authenticity is to be emphasized and alterations for whatever purpose, with the exception of safety items and necessary alterations required to comply with FAA regulations, are discouraged. Duplicated parts should be made according to original specifications. Scoring deducts are listed as standard deductions on the judging form. Aircraft presented for Customized awards are exempt from non-authenticity deducts.

Penalties can also be given "over restoration" Such as a finish with higher than original gloss. Scores for cleanliness should take in consideration as to how the aircraft has been used. Therefore, exhibited aircraft should not be penalized for showing oil stains and grease normally accumulated in operation. However, this should not excuse poor presentation for lack of preparation which a exhibition show plane deserves. Award winning aircraft must have a score from at least three judging teams. Awards are to be given only for those aircraft which are judged to be of superior quality and deserving of recognition by the Vintage Aircraft Association.

#### VII. GUIDELINES FOR AIRCRAFT

To be eligible for awards aircraft must be owned by a member in good standing of the EAA. Aircraft must be flown to AirVenture [or a subject fly-in] during the AirVenture convention [or a subject fly-in]. A manufacturer's data plate must be present on all FAA certificated aircraft, and an FAA issued airworthiness certificate must be displayed on all exhibition aircraft. Aircraft arriving to be judged should be parked in the VAA areas designated for Vintage airplanes, however parking location exceptions can be made by the category Chairmen.

Aircraft which have received awards in prior years are not eligible for an equal or lesser award in subsequent years unless it is determined by the category Chairmen that a previous award winning aircraft has been significantly improved, involving major rework, and such work is well documented. Awards will not be considered for aircraft which have been judged or have received awards in other EAA divisions. Change of ownership does not qualify aircraft to be eligible for equal or lesser awards. Aircraft must be registered and have a "JUDGE ME" sticker affixed to the prop card issued at the time of registration. Aircraft arriving after the published closing deadline will not be judged.

Change of ownership does <u>not</u> qualify an aircraft to be judged for an award previously won by a past owner for the same aircraft. However, if the aircraft was <u>significantly</u> 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.

#### **VIII. JUDGING CATEGORIES AND CLASSIFICATIONS**

Listed below are complete categories and subdivisions and awards that apply. The dates manufacture for ANTIQUE and CLASSIC aircraft have been established and will remain unchanged unless revised by action of the EAA Judging Standards Committee. CONTEMPORARY aircraft dates may be extended as experience dictates with a recommendation by the VAA Chief Judge and approved by the VAA Board of Directors.

Special awards may be created and given with the approval of the EAA Judging Standards Committee and the EAA Awards Committee to recognize aircraft with special features or characteristics which exemplify the spirit of the EAA and of the VAA.

Gold Lindy

Silver Lindy

Large Plaque Small Plaque

Small Plaque

Small Plaque

Small Plaque

ANTIQUE AIRCRAFT [Before and including 8-31-1945]

**GRAND CHAMPION** 

RESERVE GRAND CHAMPION

PIONEER AGE (Prior to 1918) Champion Runner Up	Bronze Lindy Large Plaque
GOLDEN AGE (1918 thru 1927) Champion Runner Up Outstanding open cockpit biplane Outstanding closed cockpit biplane Outstanding open cockpit monoplane Outstanding closed cockpit monoplane	Bronze Lindy Large Plaque Small Plaque Small Plaque Small Plaque Small Plaque
SILVER AGE (1928 thru1936) Champion Runner Up Outstanding open cockpit biplane Outstanding closed cockpit biplane Outstanding open cockpit monoplane Outstanding closed cockpit monoplane	Bronze Lindy Large Plaque Small Plaque Small Plaque Small Plaque Small Plaque
BRONZE AGE (1937 thru1941) Champion	Bronze Lindy

# WORLD WAR II ERA (1942 thru August 1945)

Outstanding open cockpit biplane
Outstanding closed cockpit biplane

Outstanding open cockpit monoplane

Outstanding closed cockpit monoplane

#### CUSTOMIZED AIRCRAFT

Runner Up

Champion	Bronze Lindy
Runner Up	Large Plaque
Outstanding	Small Plaque

#### TRANSPORT CATEGORY AIRCRAFT

ChampionBronze LindyRunner UpLarge PlaqueOutstandingSmall Plaque

#### WORLD WAR II MILITARY TRAINER/LIAISON AIRCRAFT

Champion Bronze Lindy
Runner Up Large Plaque
Outstanding Small Plaque

#### REPLICA AIRCRAFT

Champion Bronze Lindy
Runner Up Large Plaque
Outstanding Small Plaque

#### ANTIQUE EXPERIMENTAL CUSTOM BUILT AIRCRAFT

ChampionBronze LindyRunner UpLarge PlaqueOutstandingSmall Plaque

#### BEST CONTINUALLY MAINTAINED Small Plaque

#### **CLASSIC AIRCRAFT (9-1-1945 thru 12-31-1955)**

**GRAND CHAMPION** Gold Lindy Silver Lindy RESERVE GRAND CHAMPION CLASS I (Up to 85 hp) Bronze Lindy CLASS II (86 thru 150 hp) Bronze Lindy CLASS III (151 thru 235 hp) Bronze Lindy CLASS IV (236-up hp) Bronze Lindy CUSTOM Class A (0-80 hp) Small Plaque CUSTOM Class B (81-150 hp) Small Plaque CUSTOM Class C (151-235 hp) Small Plaque CUSTOM Class D (236-up hp) Small Plaque **OUTSTANDING MAKE And MODEL** Small Plaque

Aeronca Champ Cessna 190/195 Stinson
Aeronca Chief Ercoupe Swift
Beech Luscombe Taylorcraft

Bellanca Navion Limited Production

Cessna 120/140 Piper J-3 Cessna 170 Piper-other

Cessna 180

#### REPLICA AIRCRAFT

ChampionBronze LindyRunner UpLarge PlaqueOutstandingSmall Plaque

#### **CONTEMPORARY AIRCRAFT (1-1-1956 thru 12-31-1970)**

GRAND CHAMPION

RESERVE GRAND CHAMPION

OUTSTANDING SINGLE/MULTI ENGINE

GRAND CHAMPION CUSTOMIZED AIRPLANE

RESERVE GRAND CHAMPION CUSTOMIZED AIRPLANE

Lindy

Gold Lindy

RESERVE GRAND CHAMPION CUSTOMIZED AIRPLANE

Silver

Lindy

OUTSTANDING CUSTOMIZED

CLASS I SINGLE ENGINE (Up to 160 hp)

CLASS II SINGLE ENGINE (161 thru 230 hp)

CLASS III SINGLE ENGINE (231 hp and Up)

Bronze Lindy

Bronze Lindy

OUTSTANDING MAKE AND MODEL Small Plague

Champion Limited Production

Beech Single Engine Best Continuously Maintained

Beech Multi Engine

Bellanca

Cessna 170, 172, 175 and 177

Cessna 180/182/210 Cessna Multi Engine

Mooney

Piper PA-18 Super Cub Piper PA-22 Tri-Pacer Piper PA-24 Comanche Piper PA-23 Apache-Aztec Piper PA-28 Cherokee

#### REPLICA AIRCRAFT

ChampionBronze LindyRunner UpLarge PlaqueOutstandingSmall Plaque

#### SPIRIT AWARDS

Dean Richardson Memorial Award
Best Continuously Maintained
Limited Production
Preservation Award
Most Unique Aircraft

Bronze Lindy
Small Plaque
Small Plaque
Small Plaque
Small Plaque

#### IX. JUDGING FORM EXPLANATION AND USE

The maximum attainable score must be reserved for a unanimous and undisputed Grand Champion airplane. Such examples could never be surpassed and could only be matched by another perfect score airplane of Grand Champion quality. Consistency and fairness should be emphasized in all judging.

#### **General Appearance**

This is the only judging category that covers the aircraft in its entirety. Authenticity, workmanship, cleanliness, and maintenance of the aircraft as well as its airworthiness, as a whole are the criteria and not its individual components. Non-authentic color schemes, modern finishes, striping or decorations should result in negative points. Aircraft which have been metalized to replace original fabric or plywood should be substantially penalized. Aircraft displaying non-original type screws, nuts, bolts, cable connections and safety wire will be penalized unless there is a safety concern.

#### Cockpit

Anything visible within the cockpit, passenger compartment and baggage areas comprise the items to be considered as the cockpit. Authenticity should be stressed for the finish, upholstery, instruments, and controls. The operational condition of all components, as well as the workmanship and attention to detail should be important considerations. Installation of later date avionics should not be penalized providing that the installation does not significantly detract from the authenticity of the instrument panel or other components. Use of "display only" radio face plates as covers for modern avionics installed in original factory designated positions should be rewarded. Deductions should be made for alterations to the throttle, control stick or wheel, upholstery material patterns and non-original chroming.

#### **Engine**

This part of the aircraft includes everything "firewall forward" or in some cases, "firewall rearward". Emphasis should be given to having the original engine, engine mount, metal or composite engine cowl, accessories, and propeller. There should be nothing on the engine or in the engine compartment that wasn't there originally and everything should be installed in a first class manner. Non-original engine or engine components, accessories, engine mount, propeller, spinner, or non-authentic chroming as well as rusty or corroded items should be penalized. However the installation of an engine of the same manufacturer and type, but with higher horse power, should receive no penalty.

#### **Landing Gear**

This category includes brakes, wheels, tires, wheel fairings, and struts. Smooth tires should be rewarded if used originally. Proper workmanship for balsa and fabric wrapped struts should be rewarded. Credit should be given for retaining an original tail skid. Tail skids may be re-installed after parking the aircraft. Original tail wheels should also be given credit. Improper tire size and wheel fairings made of non-original material should be penalized. However, for safety reasons, modern brakes should receive no penalty.

#### **Fuselage**

When judging the fuselage, the first consideration is the general overall configuration. The entire fuselage including struts, mechanisms, landing gear, covering and finish should be examined. possible, judges should inspect the fuselage interior for workmanship. Note: It is always the exhibitors choice to allow the visual access to the interior, however exhibitors should be encouraged to do so since the interior reveals the quality of workmanship of formers, airframe tubing, aluminum skins, pulleys and control cables, non-authentic fairings,

cowlings, and windscreens should be penalized. Fabric covered aircraft should not be penalized for the use of synthetic covering material.

#### Wings and Tail

Judges should examine exterior wing surfaces including finish, surface tapes, struts, metal skins, composite materials, brace wires, ailerons, flaps, lights, fuel tanks, fuel caps, fuel vents, drain grommets, wing-walks, wings to fuselage and wings to gear leg fairings. Tail surfaces, including the horizontal and vertical stabilizers, vertical fin, and rudder, brace wires, and attach fittings should be inspected. Photos included in the presentation book should reveal good workmanship inside the wings and empennage. Lack of cleanliness, corrosion, old checked varnish or warped components should be penalized. Hardware should be of the era and fittings should show like new finish. Non-authentic wires, struts, pitot tube, navigation and landing lights and other exterior items should be penalized.

#### **Presentation Book**

A proper presentation book should be present and should be considered essential. The book should include information which can assist the judges in determining originality. Sales brochures can be very helpful. Photos of before, during and after the restoration process allows the judges to gain helpful understanding of the exhibited aircraft. The book will not be judged on extravagance or artistic value. For logical reasons the book should consist of copies rather than original material.

#### **Difficulty Factor**

The complexity and difficulty involved in the restoration or the preservation of a continuously maintained aircraft should be recognized. Note: This is a difficult area of scoring which involves a wide range of variables and should be thoroughly discussed by the category Chairmen during each AirVenture or judging event. Consistency is the challenging objective. Difficulty points should not be awarded because of circumstances having to do with things other than the exhibited aircraft, however consideration may be given to recognize the extensive nature of the restoration work.

#### X. NOTICE TO AWARD RECIPIENTS

Judging reviews conducted by EAA, Vintage Aircraft Association, Inc. judging volunteers are not intended to determine the airworthy condition of aircraft presented for judging by participating members. Aircraft airworthiness status remains the sole responsibility of the pilot.

## EAA VINTAGE AIRCRAFT ASSOCATION OFFICIAL AIRCRAFT JUDGING AND SCORING FORM

AIRCRAFT	YEAR	_N#	CONTEMPORARY	ANTIQUE	CLASSIC
OWNER		EAA#		CUSTOM	REPLICA
ADDRESS		(Required)	E-MAIL ADDRESS		

Poor – Fair –		CE ONLY ( Very Good -	,	AUTHENTICITY MINU Maximum Deduc	
GENERAL	P	0 - 4		NON-AUTHENTIC COLOR SCHEME	3
APPEARANCE (20)	F	5 - 8		NON-AUTHENTIC FINISH	5
	G	9 - 12		NON-AUTHENTIC STRIPING	2
	VG	13 - 16		NON-AUTHENTIC MARKINGS	2
	EX	17 – 20		OTHER	_
COCKPIT (15)	P	0 - 3		NON-AUTHENTIC INSTRUMENT	2
	F	4-6		NON-AUTHENTIC UPHOLSTERY	4
	G	7 – 9		NON-AUTHENTIC CHROMING	5
	VG	10 – 12		NON-AUTHENTIC CONTROLS	2
	EX	13 - 15		OTHER	_
ENGINE (15)	P	0-3		NON-AUTHENTIC ENGINE	12
	F	4 – 6		NON-AUTHENTIC CHROMING	5
	G	7 – 9		OTHER	-
	VG	10 –12			
	EX	13 - 15			
LANDING GEAR (10)	P	0 - 2		NON-AUTHENTIC WHEELS	2
	F	3 – 4		NON-AUTHENTIC TIRES	1
	G	5 – 6		NON-AUTHENTIC TAIL WHEEL	2
	VG	7 – 8		NON-AUTHENTIC STEERING	2
	EX	9 - 10		OTHER	_
FUSELAGE (15)	P	0-3		NON-AUTHENTIC WINDSHIELD	3
	F	4-6		NON-AUTHENTIC COWLING	5
	G	7 – 9		NON-AUTHENTIC FAIRINGS	2
	VG	10 – 12		OTHER	-
	EX	13 - 15			
WINGS & TAIL (15)	P	0-3		NON-AUTHENTIC WIRES	2
	F	4 – 6		NON-AUTHENTIC PILOT	1
	G	7 – 9		NON-AUTHENTIC LANDING LIGHTS	1
	VG	10 – 12		OTHER	-
	EX	13 - 15			
PRESENTATION BOOK	(5)	0-5		TOTAL MINUS POINTS	
DIFFICULTY FACTOR	(5)	0 - 5		TOTAL MINOSTOMIS	

TOTAL APPEARANCE POINTS		
TOTAL MINUS POINTS (deduct)	 JUDGE'S NAME	 
JUDGING SCORE		

22 June 2017



# **EAA WARBIRDS OF AMERICA**

#### I. FORWARD

The purpose of this section of the EAA Official Judging Standards is to lay the groundwork for a viable set of restoration, maintenance, and construction standards against which Warbird aircraft can be judged. The Judging Standards must be simple and, most importantly, allow consistent and fair competition between common and exotic, and between complex and simple Warbird types. In many cases, standards have been adopted which hopefully closely parallel the methods of the other judging areas while allowing for the particular needs of Warbird aircraft. It is noted that by nature, judging is highly subjective and it is hoped that by the use of a judging form, a more objective standard can be realized. We recognize that a restored Warbird aircraft in many cases represents a very substantial investment in time and money and that many rare examples are literally a national treasure. Furthermore, the winning of an award at a major EAA flyin adds immeasurably to the value of an aircraft; therefore, we sincerely hope that this judging guide will provide standards that are fair to all.

The Warbird Chief Judge and the EAA Judging Standards Committee prepared these criteria. Warbird judging philosophy is to improve the breed by stimulating competition. Awards will not be given in classes that are not represented by worthy aircraft. Authenticity is to be encouraged. This revised edition reflects additions and changes gained from judging experience and input from the individual Warbird Judges, Directors and Warbird aircraft owners.

In all cases, we are judging the aircraft only. No consideration will be given to which individual, organization, museum, etc. accomplished the restoration or to its cost. Judging will be as objective as possible and the winning aircraft should represent the very best example of workmanship and authenticity. The awards recognize the workmanship of the restorer, whether that person is the owner or a professional restorer.

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.

EAA Warbirds of America has assembled a talented and objective team of professionals that look forward to judging your aircraft each year. The latest revision to this document is available from EAA Warbird Headquarters: <a href="mailto:warbirds@eaa.org"><u>Warbirds@eaa.org</u></a> and EAA Warbirds website: <a href="mailto:www.warbirds-eaa.org"><u>www.warbirds-eaa.org</u></a>

#### II. DEFINITIONS

#### A. Warbird Aircraft:

All ex-military aircraft. This specifically means an aircraft that was operated by the military of any country. This excludes civilian equivalents of military aircraft, or developmental aircraft that have never been operated in a military capacity.

#### B. World War II Warbird:

Aircraft in this judging category must have had an equivalent type aircraft operational in military service between Sept. 1, 1939 and July 26, 1945.

#### C. Military Prototype Aircraft:

There will be a special judging category for rare military prototype aircraft, which were developed for military usage, but never went into active military service.

#### D. Reproduction Warbird:

Aircraft built to resemble a Warbird. These aircraft are of the same scale and construction technique as the original. These aircraft are structurally and aerodynamically identical to the original version. (See AIRCRAFT ELIGIBILITY)

#### III. QUALIFICATIONS OF JUDGES

Judges shall be EAA Warbirds of America members in good standing. Judges shall have a thorough knowledge of the aircraft types to be judged, this knowledge being gained from actual flying experience, maintenance, or restoration of Warbird Aircraft. Qualifications may also include historical research or experience as a licensed aircraft and power plant mechanic or aircraft inspector. Judges shall be provided with an identifying badge, which will be worn while judging.

#### IV. AIRCRAFT ELIGIBILITY

Only aircraft registered by a member in good standing of Experimental Aircraft Association and EAA Warbirds of America requesting judging will be judged. Opening and closing times and dates for judging will be plainly posted at Warbird Headquarters. Aircraft arriving after the judging deadline will not be judged. No single aircraft will be judged in two major categories such as Warbirds and Vintage at any one convention.

In the case of AirVenture EAA Fly-in and Sun 'n Fun Fly-in or other major fly-ins that may apply, the dates and times will be published in the Warbird magazine or Warbird newsletter prior to these air shows. Furthermore, aircraft to be judged at these air shows must be parked in the designated Warbird parking area during the fly-in event. Exemptions to this, such as safety considerations (i.e. helicopters) must be coordinated through the Chief Judge. These aircraft must be available to be judged over a reasonable length of time.

Change of ownership does <u>not</u> qualify an aircraft to be judged for an award previously won by a past owner for the same aircraft. However, if the aircraft was <u>significantly</u> 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.

Full-scale Reproduction aircraft will be regarded as Warbirds. Owner/exhibitors of reduced scale Warbird replicas will be regarded as homebuilts and be judged in the Homebuilt category. The general rules, which prohibit any aircraft from being judged in two divisions, will apply.

**Previous Winners:** Aircraft, which have won an award at a given show, are not eligible to win the same or a lesser award at the same show for a period of seven years. Two

awards that do not adhere to this rule are the Returning Grand Champion Award and Returning Best of Class. These two awards can be won multiple times if the aircraft continues to meet the judging criteria. Returning award winners in these two categories will constitute their own two separate classes. An aircraft can win a higher category if it has a sufficient point score to carry it to the higher award status. Once the aircraft has won Grand Champion, it would not be eligible for an award except the Returning Grand Champion Award for a period of 7 years. When this 7-year period has ended it would again be able to win any applicable award.

Past Grand Champions and past Best of Class winners will compete in these two categories using the standard judging criteria to determine a winner for Returning Grand Champion and the Returning Best of Class award.

#### V. JUDGING OPERATIONAL FORMAT

When possible, Judges shall attempt to judge an aircraft at a time for the convenience of the owner. The aircraft owner-pilots or his/her representative must be present at the time their aircraft is judged to open the cockpit and access panels, etc. if necessary and to answer any questions the judges might have regarding restoration details, systems, technical aspects, aircraft history, etc.

A judging form will be used to give as objective a means of scoring and determining awards as possible. However, this form need only be utilized for those aircraft that are definitely of award-winning caliber and definitely in competition.

Owners, pilots, and restorers are encouraged to ask the judges what they should accomplish to make their restoration a better aircraft and more competitive.

**Minimum Score:** The minimum score to be eligible to receive an award is 80 points. Scores are totaled by the individual judges and then averaged. No award will be given in any category (i.e. Best T-6, Best Jet, Best Transport, etc.) if the top scoring aircraft receives a score of less than 80 points. It is strongly believed by the Judging Committee that an award given by the EAA Warbirds of America is prestigious and that awards should not be given in any category where a sufficiently outstanding aircraft (80 points or more) is not entered. To do so would only dilute and diminish the significance of Warbird awards.

**Authenticity:** One of the goals of the EAA Warbirds of America is to preserve, in original flying condition, aircraft of our military heritage. Therefore, authenticity is an important consideration in judging. Judges shall give credit whenever possible for restoration details that were present on Warbird aircraft in military service. Examples are bomb racks, guns, gun sights, operational turrets, original cockpit configurations, radio gear, etc. However, due to the many in-service modifications, field modifications, paint schemes, etc., authenticity is a difficult factor to assess with Warbird aircraft. Furthermore, due to their unique operating characteristics, and necessary 'civilianizing', a truly stock original, unmodified ex-military aircraft is truly a rare bird. Therefore, on the objective point scoring form, points will be added for authenticity but not subtracted for lack of authenticity. It is felt that an owner should not be penalized for adding necessary radio and instrument modifications (to fit today's complex ATC environment) and safety and warning systems (i.e. better brakes, instrument lighting, etc.). Authenticity is considered more important when judging external markings and paint schemes. It is the responsibility of the aircraft owner to provide the judges with proof of authenticity. In summary, if two Warbird aircraft are identical in workmanship, etc., the one that is the most authentic will be judged the highest.

**Depth of Restoration:** Acknowledges the greater efforts that are being taken during restoration. To maximize points, the owner must be able to document the state of the aircraft prior to and during the restoration effort. It is also suggested that the owner have a "Presentation Book" containing details and pictures of the plane's restoration, pictures of areas in the aircraft that are not readily accessible, historical research data, and any information that would validate the authenticity of the pain scheme and markings, etc.

**Difficulty Factor:** Due to the extremely wide range of aircraft types which vary greatly not only in cost but in sheer scope and complexity of the restoration (i.e. T-34 to B-24), it becomes very difficult, for example, to compare a perfect restoration of a T-6 with a perfect restoration of a B-25 when comparing the two for Grand Champion. Therefore, a difficulty factor based on the type of aircraft has been determined and this number, from 1-5 will be added to the total score when comparing dissimilar aircraft for an award for which they are both eligible.

Difficulty Points	Type Aircraft
1	AT-19, BT-13, DHC-1, Do27, Finch, IAR-823, L-2, L-3, L-4, L-5, L-6, L-12, L-13, L-17, L-19, LC-126, N2S, N3N, O-1, PT-13, PT-17, PT-19, PT-22, PT-26, SF.260, SK61, T-41, T.1, U-17, UC-81
2	AT-7, AT-11, AT-17, C-45, C-78, CJ-6, Crane, F4B, FW149, H-13, Harvard, JRC-1, L-1, O-2, OS2U, P-6E, P-12, P-26, PZL-104, SNB, SNJ, T-34, T-6, UC-78, Y1C-12
3	A-36, AH-1, CM.170, F3F, F4F, F6F, F7F, F8F, Hurricane, Ha- 1112, J2F, L-29, OV-1, OV-10, P-39, P-40, P-47, P-51, P-63, Spitfire, T-28, T-31, TBM, TT-1, UH-1, Vampire, XNQ-1
4	A-1, A-4, A-26, A4D, A6M, AD, B-25, Bf 109, C-7, C-47, C-53, C-117, CT-114, F-100, F-104, F-86, F3A, F4U, F9F, FG-1, Firefly, FW190, Ki-43, L-39, Me 109, Me 262, P-38, P-80, P-82, PV-2, R4D, Sea Fury, T-33, T-37, T-38
5	A-20, B-17, B-23, B-24, B-26, B-29, Boston, C-46, C-54, C-82, C-97, C-118, C-119, C-121, C-123, F-4, Havoc, Ju52, R5D, R6D, Lancaster, Mosquito, P-70, PBY

For Warbird aircraft not covered by the above table, the appropriate difficulty factor will be assigned by a majority of the judges.

It is recommended that aircraft be grouped by type on the form to aid in comparing scores of similar types for Best of Type awards. The scores for the same aircraft as determined by each Judge will then be totaled and the Grand Champion should be the plane with the highest overall total score (including difficulty points). Reserve Grand Champion would have the second highest. Best of Type (i.e. Best T-28 would be the T-28 with the highest total score, not including difficulty points) among other T-28s, as indicated by the sum of the individual Judges' score sheets.

## **VI. JUDGING CATEGORIES**

CATEGORY	MAXIMUM POINTS
General Appearance: This covers the aircraft in its entirety; workmanship, cleanliness, maintenance, overall appeal. Paint scheme should be appropriate for type and model, i.e. a Navy T-28 or SNJ should be consistent with the period, and the squadron insignia, etc. should correspond to assigned ship, command, etc. However, they need not represent an exact copy of a previous Warbird, but rather painted as representative of that time period, type model and service. (No deduction for glossy paint as this is an example of an item that improves aircraft maintenance.) No deduction for the normal amount of dirt and soil accumulated in obvious use. These are flying aircraft and should be judged accordingly.	15
<b>Fuselage:</b> Cleanliness, workmanship, interior details, wiring, painting interior and exterior, control cables, safety of flight items, etc. If possible, the judges should view the fuselage interior for quality of inside restoration. It is the owner/pilot's prerogative to remove or not remove inspection covers. However, it is urged that pilots cooperate since the inside of the fuselage is the major portion of the restoration of an aircraft.	12
<b>Landing Gear and Wheel Wells:</b> Cleanliness, workmanship, routing of hoses and lines, condition of tires, brakes, etc.	10
Wings and Tail Surfaces: Workmanship, painting, cleanliness, safety of flight items.	11
<b>Engine and Accessory Section:</b> Cleanliness, safety of flight items, proper safe tying, cotter pins, linkages, lines, and hoses in good repair, etc.	10
Cockpit: Workmanship, detail, cleanliness, necessary proper and operating instrumentation, placards, markings, wiring harnesses, cockpit layout, lighting, etc	12
Authenticity: Plus points only — primary attention to external details, paint schemes, etc. No deduction for necessary modernization of radios and systems. Points are also given for details such as guns, bombs, bomb racks, gun sights, original cockpit fixtures, panel layout, radios, etc.  Paint and Markings  Cockpit  I-5 pts. Engine, prop, accessory section Airframe Components (wings, cowls, fairings, etc.)  1-5 pts.	20
<b>Depth of Restoration:</b> This category will evaluate how far down the aircraft was taken during its restoration and how well this was documented.	10
<b>Difficulty Points:</b> Difficulty points will be assigned as per those listed in the "Difficulty Factor" above. They are to be used only when comparing dissimilar aircraft that are in contention for the same award, i.e. Grand Champion and Reserve Grand Champion. Obviously, all aircraft of the same type receive the same difficulty factor, (i.e. all T-6/SNJ/Harvard's shall receive +2 pts).	

Note: A perfect score is 100, plus the difficulty points when applicable.

#### VII. AWARDS GIVEN BY THE EAA WARBIRDS OF AMERICA

Grand Champion Warbird\*
Grand Champion Post-WWII Warbird\*
Gold Lindy & Gold Wrench
Gold Lindy & Gold Wrench

Reserve Grand Champion Warbird\* Silver Lindy & Gold Wrench Reserve Grand Champion Post-WWII Warbird\* Silver Lindy & Gold Wrench

Returning Grand Champion WWII Plaque Returning Grand Champion Post-WWII Plaque

Best P-51 Plaque & Silver Wrench Plaque & Silver Wrench Best T-28 Best T-6 Plaque & Silver Wrench Best T-34 Plaque & Silver Wrench Plaque & Silver Wrench Best Liaison/Observation Plaque & Silver Wrench Best Jet Plaque & Silver Wrench **Best Bomber Best Transport** Plaque & Silver Wrench Best Military Classic Plaque & Silver Wrench Best Helicopter Plaque & Silver Wrench Best Military Prototype Plaque & Silver Wrench Best Reproduction Warbird Plaque & Silver Wrench Returning Best of Class Plaque & Silver Wrench

Keep 'em Flying Award-Gold Plaque & Gold Wrench Keep 'em Flying Award-Silver Plaque & Silver Wrench

Phoenix Award Plague & Gold Wrench

Most Authentic Plaque
Judges Choice Plaque
Preservation Plaque

\*Denotes Difficulty Factor added to final score to determine placing.

**Special Awards** to be given as deemed necessary by the judges such as Most Rare, Most Improved or Special Recognition for a deserving restoration that does not fit into a specific category may be designated.

**Keep'em Flying Award:** Honors those aircraft whose engines, propellers and/or cockpits have been majorly modified provided the airframe, paint and markings appear standard. An example would be a T-34 with an upgraded Continental IO-550 engine, three-blade prop and a glass cockpit, but with standard airframe, military paint and markings. Aircraft presented with a Keep'em Flying Award will receive a gold or silver plaque with gold or silver wrench awards going to the restorer. The Keep'em Flying Awards will be given at the sole discretion of the judges. The judging application will include a box to check if you'd like to compete for the Keep'em Flying Award in addition to the traditional awards.

**Gold/Silver Wrenches Award:** Recognition is also given to the person or persons responsible for the actual work and labor that brought the restoration to reality. This recognition will consist of a "Golden Wrench Award" for the four top awards, which represent Grand Champions and Reserve Grand Champion in both WWII and Post WWII categories, and "Silver Wrench Awards" for each Best of Class. Current practice is to only recognize the gold and silver wrench awards at EAA's AirVenture.

To qualify to have a "Best of Class" award, at least three eligible aircraft of that type must be present for judging, i.e. three T-6s entered that have not won equal or higher awards in the previous seven years. Furthermore, should three Warbird aircraft of a single type not be present and eligible for judging, then aircraft of the same category can be combined and an award will be given for Best of that category, i.e. Best L-Bird, Best Primary Trainer, Best Fighter etc.

In the case of Bombers, Transports and Jets, it is recognized that due to their size, cost and rarity, it is unlikely that there could be three present of any one type. Therefore, all transports, bombers and jets will be judged regardless of type or number present. Example: Two C-47s and a UC-78 would be judged together for Best Transport; an F-86, T-37 and T-33 would be judged together for Best Jet.

	JUDGING	MAX PTS	YOUR SCORE
Aircraft Judging Scoresheet  EAA / Warbirds of America	1. General Appearance	15	SCORE
N number:	2. Fuselage	12	
Aircraft Model:	Landing Gear / Wheel Wells	10	
Aircraft Name/ Nose Art/ Tail Code:	4. Wings and Tail Surface	11	
Category:	5. Engine & Accessory Section	10	
Owner / Hometown:	6. Cockpit	12	
Restorer / Hometown:	7a. Authenticity: Paint & Marking	5	
Date and Time Judging Started:	7b. Authenticity: Cockpit	5	
Owner / representative present for judging: Yes, then continueNo, then re-	7c. Authenticity: Engine, Prop, and Accessory section	5	
schedule	7d. Authenticity: Airframe Components	5	
Difficulty Points: 1. AT-19, BT-13, DHC-1, Do27, Finch, IAR-823, L-2, L-3, L-4, L-5, L-6, L-12, L-13, L-17, L-19, LC-126, N2S, N3N, O-1, PT-13, PT-17, PT-19, PT-22, PT-26, SF.260, SK61, T-41, T.1, U-	8. Depth of Restoration	10	
17, UC-81 2. AT-7, AT-11, AT-17, C-45, C-78, CJ-6, Crane, F4B,	Sub	- Total	
FW149, H-13, Harvard, JRC-1, L-1, O-2, OS2U, P-6E, P-12, P-26, PZL-104, SNB, SNJ, T-34, T-6, UC-78, Y1C-12 3. A-36, AH-1, CM.170, F3F, F4F, F6F, F7F, F8F, Hurricane, Ha-1112, J2F, L-29, OV-1, OV-10, P-39, P-40, P-47, P-51, P-	Difficulty Points Select from list. If not on list see Chie	ef Judge	
63, Spitfire, T-28, T-31, TBM, TT-1, UH-1, Vampire, XNQ-1 4. A-1, A-4, A-26, A4D, A6M, AD, B-25, Bf 109, C-7, C-47, C- 53, C-117, CT-114, F-100, F-104, F-86, F3A, F4U, F9F, FG-1, Firefly, FW190, Ki-43, L-39, Me 109, Me 262, P-38, P-80, P- 82, PV-2, R4D, Sea Fury, T-33, T-37, T-38	Grand Total		
5. A-20, B-17, B-23, B-24, B-26, B-29, Boston, C-46, C-54, C-82, C-97, C-118, C-119, C-121, C-123, F-4, Havoc, Ju52, R5D, R6D, Lancaster, Mosquito, P-70, PBY			
Comments and remarks (additional comments on base)	ack):		
Judges Signature, Printed Name, and Date			



# **ULTRALIGHT/LIGHT-SPORT AIRCRAFT**

#### I. REQUIREMENTS FOR SELECTION OF JUDGES

The Ultralight/Light-Sport Aircraft General Chairman and the Ultralight/Light-Sport Aircraft Chief Judge with the approval of the Chairman of the Judging Standards Committee will select Judges.

Only those individuals who possess the qualifications detailed below shall be invited to be Ultralight/Light-Sport Aircraft Judges.

- A. The individual shall be a current member in good standing of the Experimental Aircraft Association.
- B. The individual shall possess knowledge of Ultralight/Light-Sport Aircraft construction methods, workmanship requirements, and safety requirements.
- C. The following specific qualifications may be utilized by the Chairman and Chief Judge to determine if an individual meets the above requirements.
  - 1. Experience gained by the construction of an Ultralight/Light-Sport Aircraft.
  - 2. Experience gained by flight time in an Ultralight or Light-Sport Aircraft.
  - 3. Membership in an Ultralight/Light-Sport Aircraft Chapter of the EAA.
  - 4. Possession of any government A&P license.
- D. The individual shall possess the personal dedication to pursue the task of judging diligently to conclusion with a minimum of supervision.

Judges shall be chosen from as many diversified areas of the country as possible to provide a broad experience from the various areas where Ultralight/Light-Sport Aircraft activity exists.

The Ultralight/Light-Sport Aircraft Judging Committee shall consist of the Chief Judge, and the duly designated Judges.

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.

#### II. JUDGING OPERATIONAL FORMAT

The following represents the general format of the Ultralight/Light-Sport Aircraft Aircraft judging at EAA fly-ins.

- A. A daily planning meeting shall be convened by the Chief Judge each day of the fly-in at 8:00 AM or other time as determined appropriate or necessary. The purpose will be to discuss operating practices, provide instructions to the judges, and to review ratings.
- B. Judging shall be initiated immediately following the planning meeting.
- C. Judging shall start no later than the morning of the second day of the convention and continue until the day before the Ultralight/Light-Sport Aircraft 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 is expected to judge for a minimum of four hours each day or as determined necessary until all Ultralight/Light-Sport Aircraft have been judged, and will continue to participate until all awards are assigned.
- E. Judges shall wear judges' badges or hats while judging.
- F. Judges shall operate in teams of three whenever possible.
- G. Judges shall utilize scoring forms as described in Section IV of this section. In the event electronic judging procedures are utilized judges shall utilize the handheld computers provided.
- H. Scoring forms shall be turned in each evening to the designated person.
- I. No less than three Judges must judge an Ultralight/Light-Sport Aircraft in order to make it eligible for an award. (This requirement may be reduced if determined appropriate by the EAA Judging Standards Committee.)

#### III. AIRCRAFT TO BE JUDGED

#### A. Registration:

Only Ultralight/Light-Sport Aircrafts, which have been registered at Ultralight/Light-Sport Aircraft Aircraft Registration, will be judged. At the time the plane is registered, the owner/pilot shall indicate on the form if he/she wishes to have the craft judged. At that time he/she will be given a "Judge Me Please" sticker, which is to be affixed to the aircraft in plain view. In order for the aircraft to be judged, the owner/exhibitor will be required to sign a statement on the judging application form certifying that the aircraft meets all the requirements of Part 103. The following information will be required on the registration form:

- EAA Membership Number. (EAA membership is required in order to be iudged.)
- 2. Category: Ultralight or Light-Sport Aircraft.
- 3. Aircraft registration.
  - a. N # (if applicable)
  - b. Other reg. nos.: EAA, USUA, ASC.
  - c. Aircraft name and manufacturer.
  - d. Color.
  - e. Number of seats.
  - f. Empty weight.
  - g. Fuel capacity.
  - h. Max speed level flight.

Note: The above statistics may be published with regard to the award winning aircraft.

#### B. **Definitions**

Ultralights are those aircraft, which qualify under FAR Part 103. Judges may use their own discretion in determining that the aircraft complies; this may include weighing the aircraft.

Light-Sport Aircraft are those aircraft other than factory built, that are certified (N-numbered) Experimental Amateur Built or experimental light-sport.

Antique Ultralights are those vehicles that have been flown for at least 25 years. These aircraft have not had major changes to their airframe or engine configuration installation. Minor changes due to normal repair or restoration work is acceptable.

#### C. Judging Sticker

The "Judge Me" sticker has three boxes for the judges to initial when each one completes his judging.

- D. An Ultralight/Light-Sport Aircraft in order for an award must have flown at this convention, or verification that it has flown such as a photograph or signed log entry, must be provided.
- E. Only owner built Ultralight/Light-Sport Aircraft will be eligible for awards. Factory built aircraft are not eligible.
- F. Aircraft will not be judged in two major categories, e.g. Light-Sport Aircraft and Homebuilt. In order to be judged as a Light-Sport Aircraft, the aircraft must be parked, as well as registered, in the Ultralight/Light-Sport Aircraft area.
- G. Any aircraft, which has won an award at the fly-in, will in future years be eligible for consideration only for a higher award.
- H. Change of ownership does <u>not</u> qualify an aircraft to be judged for an award previously won by a past owner for the same aircraft. However, if the aircraft was <u>significantly</u> 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

A numerical judging system is utilized in which the judges rate the craft and their components numerically and the sum totals of these scores are used to determine the winners.

- B Numerical rating forms will be provided for the judges' use. A copy is included in this manual.
- C. Judges may develop his/her own technique for judging. The individual technique is of small consequence so long as the objectives of the judging program are met.

#### D. Impartiality

It is of prime importance that each aircraft be treated in an unbiased manner. Judges may disqualify themselves if there is any factor that would tend to affect their judgment.

- E. It is recognized that aircraft are meant to be flown and enjoyed. Allowances will be made for exhaust discoloration and minor traces of flight.
- F. There will be no tie. In the event of tie scores, the chief judge will be the tiebreaker.

- G. Ultralight/Light-Sport Aircraft will be judged on the basis of the following qualities as these apply to the components listed in the Ultralight/Light-Sport Aircraft judging and scoring form.
  - 1 General appearance.
  - 2. Safety.
  - 3. Workmanship.
  - 4. Adherence to standard aircraft mechanical practices where applicable.
  - 5. Compliance with applicable FAA regulations.
  - 6. Neatness and fit.
  - 7. Originality and innovation.

#### H. Disqualification

A duly registered Ultralight/Light-Sport Aircraft may be disqualified by a two-thirds majority vote of the judging staff.

#### V. AWARDS

The following awards are available to be given:

#### **Light-Sport Aircraft**

Light oport Anoralt	
Grand Champion	Gold Lindy
Reserve Grand Champion	
Honorable Mention	Plaque
Ultralight	·
Grand Champion	Gold Lindy
Reserve Grand Champion	Silver Lindy
Honorable Mention	Plaque
Antique Ultralight Champion	Plaque
Flex Wing	•
Champion	Plaque
Honorable Mention	Plaque
	•

Each of these awards will be given only if there are aircraft on the field that qualify for the award.

With the approval of the Judging Standards Committee and the Awards Committee, special awards may be given when warranted.

# **EAA ULTRALIGHT/LIGHT-SPORT AIRCRAFT** (REQUEST FOR JUDGING)

JUDGING MASTE	R
NUMBER	

**INSTRUCTIONS:** 1. Review Official EAA Judging Manual (**found at UL HQ – just ask!**).

2. Complete this form.

3. Bring form to Judges' Office or UL HQ.

4. Receive Judge's Registration (Master) number.

5. Receive "Judge Me Please" sticker.

LICHT SDODT AIDCDAET

**REMEMBER:** If you request Judging, prepare your aircraft and remain at the fly-in until the

AWARDS are presented.

CATECODY.

Please PRINT the following information CLEARLY so we can READ it! ULTRALIGHT/LIGHT-SPORT AIRCRAFT INFORMATION

FAA N#OTHE	R #				
EAA/USUA/ASC NUMBER)	Kπ				
AIRCRAFT NAME _		MANUFACTURER			
AIRCRAFT COLOR	NUMBER OF SEATS				
EMPTY WEIGHT	FUEL CAPACITY	EL CAPACITY MAX CRUISE SPEED			
ENGINE MANUFACTURER		HORSEPOWE	ER <b>Did</b>		
you build or restore the a	above aircraft? Yes No _				
you build or restore the a	above aircraft? Yes No _ or dealer for this aircraft? Yes				
you build or restore the a  Are you a manufacturer of  I hereby certify that the	above aircraft? Yes No _ or dealer for this aircraft? Yes ULTRALIGHT/LIGHT-SPO	No DRT AIRCRAFT conforms			
you build or restore the a Are you a manufacturer of I hereby certify that the and regulations of the c **	above aircraft? Yes No _ or dealer for this aircraft? Yes	No No ORT AIRCRAFT conforms	with the rule		
you build or restore the a Are you a manufacturer of I hereby certify that the and regulations of the c **	above aircraft? Yes No _ or dealer for this aircraft? Yes_ ULTRALIGHT/LIGHT-SPC ategory selected above.	No No ORT AIRCRAFT conforms	with the rule		
you build or restore the a Are you a manufacturer of I hereby certify that the and regulations of the c ** PARKING LOCATION: (B	above aircraft? Yes No _ or dealer for this aircraft? Yes_ ULTRALIGHT/LIGHT-SPC ategory selected above.	No  ORT AIRCRAFT conforms  ***********************************	with the rule		
you build or restore the a Are you a manufacturer of I hereby certify that the and regulations of the c ** PARKING LOCATION: (B AREA	above aircraft? Yes No or dealer for this aircraft? Yes_ ULTRALIGHT/LIGHT-SP( ategory selected above. ************************************	No  ORT AIRCRAFT conforms  *********  ur aircraft to another spot until all jud  ROW  NFORMATION	with the rule		
you build or restore the a Are you a manufacturer of I hereby certify that the and regulations of the c  ** PARKING LOCATION: (B  AREA  NAME  Home Address: Street	above aircraft? Yes No or dealer for this aircraft? Yes_ ULTRALIGHT/LIGHT-SPC ategory selected above. ************************************	No  ORT AIRCRAFT conforms  **********  ur aircraft to another spot until all jud  ROW  NFORMATION  AA Number	with the rule		

Please be sure you are familiar with all EAA General and Ultralight/Light-Sport Aircraft Judging Rules. Check with any Judge or UL HQ.

III TDAI ICHT

## OFFICIAL AIRCRAFT JUDGING AND SCORING FORM

## **ULTRALIGHT/LIGHT-SPORT AIRCRAFT**

MASTER NUMBER/SHEET NUMBER		DAT				
AIRCRAFT MAKE		LOCATION _				
COLOR						
			EAA NUMBI			
LOCAL ADDRESS				(Required)		
ENGINE	DATA:		FACTURER			
		H.P. / C	CC			
Poor – Fair – G Excellent	ood – Ve	ery Good –				
GENERAL	P	0 - 4	LANDING GEAR	Р	0 -2	
APPEARANCE	F	5 - 8		F	3 - 4	
	G	9 - 12		G	5 – 6	
	VG	13 - 16		VG	7 – 8	
	EX	17 – 20		EX	9 - 10	
COCKPIT &	P	0 - 3	WINGS	P	0 - 3	
CONTROLS	F	4 – 6		F	4 – 6	
	G	7 – 9		G	7 – 9	
	VG	10 – 12		VG	10 - 12	
	EX	13 - 15		EX	13 – 15	
ENGINE (S)	P	0-3	TIP RUDDERS	P	0 – 3	
	F	4 – 6	WARPING SYSTEM	F	4 – 6	
	G	7 – 9	CANARD, ELEVONS	G	7 – 9	
	VG	10 –12	RUDDERVATORS	VG	10 – 12	
	EX	13 - 15	CONVENTIONAL 3 AXIS	EX	13 - 15	
JUDGE	S NUMB	ER	JUDGING TEAM		-	

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JUDGES NAME\_\_\_\_\_\_TOTAL POINTS \_\_\_\_\_

## **ROTORCRAFT**

# I. REQUIREMENTS FOR ROTORCRAFT JUDGES

A. The Judging Chairman shall be selected by the Rotorcraft Chairman subject to the approval of the Judging Standards Committee.



- B. Judges shall be selected by the Judging Chairman subject to the approval of the EAA Judging Standards Committee and the Rotorcraft Chairman.
- C. Rotorcraft Judges shall have the following qualifications:
  - 1. Current EAA membership in good standing.
  - 2. Knowledge of rotorcraft construction methods and safety requirements, along with workmanship and flying.
  - Experience should have come from building and flying of the rotorcraft type he is to judge.
  - 4. Active participant or enthusiast in the rotorcraft movement.
- D. The judges are to be aware that they represent the EAA and act accordingly. They will be diplomatic in their dealings with the exhibitors and constructive in their criticism.

#### II. JUDGING

A planning meeting shall be held each day of the fly-in at an agreed time to discuss operating practices and review ratings. Judging shall be done each day of the fly-in to accommodate the new arrivals and until all craft have been judged.

Judging shall be completed and final decisions made by the morning of the day before the awards ceremonies so that the Awards Chairman will have time to prepare the awards. Only rotorcraft that are registered at aircraft registration will be judged. "Judge Me" stickers will be provided to the exhibitors and must be applied to the craft in order to be judged. The judges shall initial the sticker after inspection of the machine.

Judges shall use the rating form provided in this book.

Three or more judges shall be used.

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.

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.

Each aircraft shall be judged on all features that are visible.

The judge 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 two 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.

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.

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 aircraft need not be absolutely new in order to compete.

Each of the listed awards will be given only if there is present on the field an aircraft that qualifies for the award.

With the approval of the Judging Standards Committee and the Awards Committee, special awards may be given when warranted.

#### III. ELIGIBILITY FOR AWARDS

The aircraft should be amateur built. For an aircraft to be classed by the FAA as Amateur Built, 51% of its construction must have been accomplished by the owner/builder. The judges shall be alert for those aircraft that have not been built by the exhibitor. These craft do not represent an accomplishment of the owner and should be down rated. The owner is encouraged to document the building process and to bring that documentation, especially including photos, to the fly-in for the benefit of the judges. In particular, the logbooks and registration certificate should also be available to the judges. Without such documentation, points <u>may</u> 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.

The rotorcraft must be a flying machine. All of the FAA required flying hours must have been flown off in order to be eligible for any of the awards. However, rotorcraft need not have flown at the convention in order to be eligible.

Any rotorcraft, which has won an award at the fly-in, will in the future be eligible only for a higher award.

Change of ownership does <u>not</u> qualify an aircraft to be judged for an award previously won by a past owner for the same aircraft. However, if the aircraft was <u>significantly</u> 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 CRITERIA

- A. General appearance
- B. Power plant installation
- C. Rotor or tail assembly
- D. Wheel and landing gear
- E. Cockpit and controls
- F. Rotor and propeller
- G. Standard aircraft construction procedures
- H. Judging of rotorcraft relies heavily on the knowledge and experience of the judges, and these guidelines are only to help as a general rule.
- I. General: These rotorcraft are flying craft and so consideration will be given for the normal evidence of flight.

- J. Difficulty Points: A maximum of 5 bonus points may be given when comparing dissimilar rotorcraft based on the differences in complexity and construction effort involved.
- K. Aircraft owner must be a current EAA member in good standing.

### **V. AWARDS**

:		
A.	GRAND CHAMPION	Gold Lindy
	RESERVE GRAND CHAMPION	
C.	CHAMPION	Bronze Lindy
	THE "KEN BROCK OUTSTANDING WORKMANSHIP	,
	AWARDS" one or two at the judges' discretion	Plaques

## EAA ROTORCRAFT

## JUDGING AND SCORING FORM A

			SHEET NO.		DATE	Σ	
ROTORCRAFT MAKE			N-NUMBER		COI	_OR	
ENGINE DATA MFG							
OWNER			EAA #(Required)				
ADDRESS					(Regui		
PHONE #			E-MAIL ADDRESS				
			SC	ORING			
	POOR 0 - 4	FAIR 5 - 7	GOOD 8 - 10	V. GOOD 11 - 13	EXCELLENT 14 - 16	SUB TOTAL	
GENERAL APPEARANCE							
COCKPIT AND CONTROLS							
ENGINE PACKAGE							
ROTOR BLADES AND HEAD ASS'Y							
LANDING GEAR							
TAIL OR TAIL ROTOR ASS'Y							
JUDGES NAM	IES		(	COMMENTS	S TOTAL POIN	TS	

## **SEAPLANE**

#### I. FOREWORD

The purpose of this section is to set the standards by which seaplanes are to be defined and judged, and to outline the



standards by which the judging process is to be done including the qualifications of the judges. In Seaplane Judging, the principle guidelines are workmanship and maintenance.

#### **II. DEFINITIONS**

- A. A seaplane is any aircraft fitted to be operated off of water. It may be type certificated or a homebuilt licensed as an Experimental, or an Ultralight.
- B. Amphibian refers to any seaplane, which is also capable of being operated off of land or water without having to remove or change its undercarriage.
- C. Ultralight refers to those seaplanes, which qualify under FAR Part 103.

#### III. GENERAL

- A. A current EAA membership by the owner is a prerequisite for eligibility of an aircraft to be judged, and the EAA membership number must appear on the Pilot Registration Form.
- B. Among certificated aircraft, only those that are 25 years old or older as of start of the convention will be eligible for judging.
- C. Any aircraft parked at Wittman Regional Airport during EAA AirVenture will be regarded as belonging to the category of the area in which it is displayed. For example, the Seaplane Judges will judge amphibians that are parked in the amphibian area at Wittman Regional Airport as amphibians. Those amphibians whose owners elect to park other than in the amphibian area will only be judged by the Seaplane Judges if a specific request is made to the Seaplane Judging Chairman and the aircraft has not or will not be judged in their appropriate category such as antique, classic, homebuilt or ultralight. However, the Homebuilt or Vintage Judges, being aware of the following rule, will judge a seaplane parked at the seaplane base, if the owner chooses so.
- D. Aircraft may not be judged in two categories at any one fly-in. (For example, having been judged at Wittman Regional Airport during EAA AirVenture, the aircraft is not eligible to be judged at the EAA Seaplane Base even though it may be moved there during the fly-in.)

#### IV. SELECTION OF JUDGES

- A. The EAA Seaplane Judging Chairman shall be selected by the EAA Seaplane Chairman subject to approval by the EAA Judging Standards Committee.
- B. The EAA Seaplane Judges shall be selected by the EAA Seaplane Judging Chairman subject to the approval of the EAA Judging Standards Committee and/or the EAA Seaplane Chairman.
- C. EAA Seaplane Judging Chairman and EAA Seaplane Judges are required to be a current EAA member in good standing.

#### V. QUALIFICATIONS OF THE JUDGES

- A. Judges shall be a current member in good standing of the EAA.
- B. Judges must possess a sound background and knowledge of aircraft construction and maintenance techniques and in particular as these apply to seaplanes.

- C. The following qualifications may be utilized to determine if an individual meets the requirements of paragraph B above:
  - 1. Aircraft and Powerplant Mechanics License
  - 2. Aircraft Inspector License
  - 3. EAA Technical Counselor
  - 4. Experience gained by work in metal, wood, and composite construction and restoration of aircraft.
  - 5. No one will be eligible to be a judge in a year in which he/she has an airplane to be judged.
- D. Judges shall be dedicated to the task, fair and impartial, and aware that he or she is a representative of the EAA and conduct him or her with discretion and dignity. Any judge who is in any position by which he could be regarded as biased regarding an aircraft such as by friendship or by a prior prejudice should disqualify himself from judging that aircraft.
- E. EAA Seaplane Judging Chairman shall not have a vote except in the case of a tie.
- F. 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.

#### VI. JUDGING OPERATIONAL FORMAT

- A. Daily planning meetings of the judges shall be convened until the final decisions/selections are determined.
- B Judges shall wear a badge or identify themselves as judges while acting in the judging capacity.
- C Judges shall operate in teams of two or three whenever possible.
- D. Aircraft will be judged by scoring according to a score sheet or in electronic form using hand-held portable computers. Each aircraft shall then be assigned a final score representing the average scores of at least three judges.

#### VII. JUDGING PRACTICES

- A. Aircraft will be judged on all features that are visible. Judges may request the owner to open the cockpit, engine cowl or other areas. This should be done only when at least two judges are available.
- B. Points will be given according to the criteria in the judging form. Authenticity shall be one of the factors in the judging. No deduction shall result from changes, which enhance the safety and utility of the aircraft such as modern radios and navigation equipment, fire control systems, and crash restraints. No deduction will be given for increased engine size or float replacement with modern floats, or retraction of wing floats. Otherwise, plus points will be given for original equipment.
- C. Most owners are proud of their aircraft and maintain their aircraft as well as possible. Aircraft are intended to fly, and in particular seaplanes will exhibit the special effects of their use. Those unavoidable indications of normal use will not detract from the scores.
- D. Judges are encouraged to put their own comments on the judging forms regarding any unique or special items noted during the judging which are deemed important to the understanding of his rating. Their 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.
- E. Consistency and Fairness are the essential elements of the judging process and will be strived for to the utmost.

#### **VIII. JUDGING CRITERIA**

#### A. General Appearance

This covers the aircraft in its entirety. This applies to workmanship, cleanliness, maintenance, and overall appeal. Included in this is the airworthiness of the aircraft as a whole. Consistency is a prime factor. The airplane need not necessarily have an exceptionally polished or shiny finish, but it should be consistent.

#### B. Cockpit

Anything visible within the cockpit and passenger compartment comprises the items under inspection in this category. Workmanship including the finish, upholstery or lack of, instruments, controls and other components. Safety equipment including crash restraints, fire control equipment and any other safety factors should be given significant weight. Installation of modern electronics should not be penalized.

#### C. Engine

Consideration should be given to the workmanship and conformity to standard aircraft procedures as applied to the engine, propeller, mounting, cowling, firewall and accessories.

#### D. Undercarriage (floats)

This category should include the floats or hull, brakes, wheels, tires, landing gear, float struts, all appropriate fairings and water rudders. Minor paint scratches on the hull or sundry attach fittings, excess grease on wheels or fittings or general lack of cleanliness should be penalized.

#### E. Fuselage

The first consideration should be its overall general configuration. The entire fuselage including all struts, mechanism, gear mountings, and covering should be examined for workmanship and appropriate cleanliness. If possible the judges should view the fuselage interior for quality of maintenance or restoration. The point should be stressed that it is the owner/exhibitor's prerogative to refuse removal of any inspection covers or other access; however, it is urged that the exhibitor be cooperative since the inside of the fuselage is a major portion of the building and maintenance of a seaplane. The quality of workmanship of the formers, woodwork, general finish, inside tubes, pulleys, cables and fairleads and interior finish on the tubes or skin are all points that should be considered.

#### F Wings and Tail Surfaces

Judges should examine the exterior covering and finish, struts, braces and wires, ailerons, flaps, navigation lights, fairings, and gas tank/cover and cap. The tail surfaces including the bracing wires and attach fittings should all be considered. Internal examination is desirable.

#### G. Presentation Book

If the airplane is a homebuilt, a restoration, or a rare conversion, a presentation book may be judged on the details of the contents as they relate to authenticity, research construction or assembly, previous aircraft use and prior history or other pertinent details. Points will not be earned on the beauty or artistic quality of the book.

#### H. Cleanliness

The aircraft should be clean and ready for show. Consideration should be given to the difficulty of cleaning a high wing aircraft on floats or a high wing amphibian. Points should not be deducted for bugs on leading edges, which are unreachable if they are the result of the one flight to the show competition.

#### IX. AWARDS

Awards will be given in the following classifications with the exception that should any class not be represented by an aircraft worthy of receiving the award, it need not be awarded. Conversely, EAA Seaplane Judges may give special awards with the approval of the EAA Judging Standards Committee when indicated. As for instance, this might be indicated for a composite or wood airplane, or for some other special consideration. It is the intent that no airplane would be excluded because of its construction type.

No aircraft may be judged for an award previously won by that same aircraft. However, if the aircraft was <u>significantly</u> improved and additional documented restoration work was accomplished, then it could be considered again for judging. A change of ownership does not qualify an aircraft to be judged for that same award. In all cases of eligibility, etc., a vote by the majority of judges will be used to decide.

A.	Grand Champion	Gold Lindy
	Reserve Grand Champion	
	Champion	
D.	Outstanding Metal Floatplane	Plaque
E.	Outstanding Fabric Floatplane	Plaque
	Outstanding Amphibian	
	Outstanding Homebuilt	
	Judges' Choice	
	Outstanding Workmanship, Ultralight	

#### EAA SEAPLANE JUDGING FORM

**CATEGORY** FABRIC **METAL** AMPHIBIAN REGISTRATION NO AIRCRAFT TYPE OWNER \_\_\_\_\_ EAA #\_\_\_\_ (Required) OWNER'S ADDRESS\_\_\_\_\_ PHONE # \_\_\_\_ E-MAIL ADDRESS \_\_\_\_ Poor – Fair – Good – Very Good – Excellent GENERAL P UNDER-0 - 4 Р 0 -2 APPEARANCE F 5-8 F 3 - 4 carriage G 9 - 12 (10)G 5 - 6(20)VG VG 13 - 16 7 - 817 - 209 - 10 EX EX FUSELAGE P 0 - 3 COCKPIT P 0 - 3 F (15)4 - 64 - 6(15)7 - 9G 7 - 9G VG 10 - 12 VG 10 - 12EX 13 - 1513 - 15 EX ENGINE P 0 - 3WINGS & P 0 - 3(15) F 4 - 6Tail F 4 - 6G 7 - 9(15)G 7 - 9VG 10 - 12VG 10 - 1213 - 15 13 - 15 EX EX **BONUS POINTS** TOTAL **Presentation Book** 0 - 5**BONUS POINTS TOTAL** 

\_\_\_\_\_ JUDGE

TOTAL

June 2017 45

0 - 5

JUDGE'S REMARKS

Difficulty

## JUDGE QUALIFICATION SHEET

NAME		EAA #		
TREET ADDRESS			(Required)	
	NE (Home)			
E-MAIL ADDRESS		EAA CHAPTER #		
Have you/are you buildin		YES	NO	
		Name/Type		
Pilot License	Private	_ Commercial		Air
Mechanic License	Aircraft	_Power Plant		Other
Chapter Designer	Yes	_No		
riease list experience or ed	ducation felt by you to be per	rtinent to quality y	ou as a a	ircraft judge.

# **NOTES**



#### EXPERIMENTAL AIRCRAFT ASSOCIATION

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