



EXPERIMENTAL AIRCRAFT ASSOCIATION

O F F I C I A L

E A A J U D G I N G

S T A N D A R D S M A N U A L



FOREWORD

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

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

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

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

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

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

AWARDS

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

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

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

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

THE JUDGES

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

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

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

GENERAL

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

EAA STATEMENT OF AIRCRAFT JUDGING POLICY

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

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

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

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

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

The Judging Standards Committee is composed of the following members:

Chairman, EAA Judging Standards Committee
Chairman, Homebuilt Aircraft Judging
Chairman, Vintage Aircraft Judging
Chairman, Warbirds of America Judging
Chairman, Rotorcraft Judging
Chairman, Ultralight/Light-Sport Aircraft Judging
Chairman, Seaplane Judging

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

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

E-Mail: EAAJudgingChangesRequest@eaa.org

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

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

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

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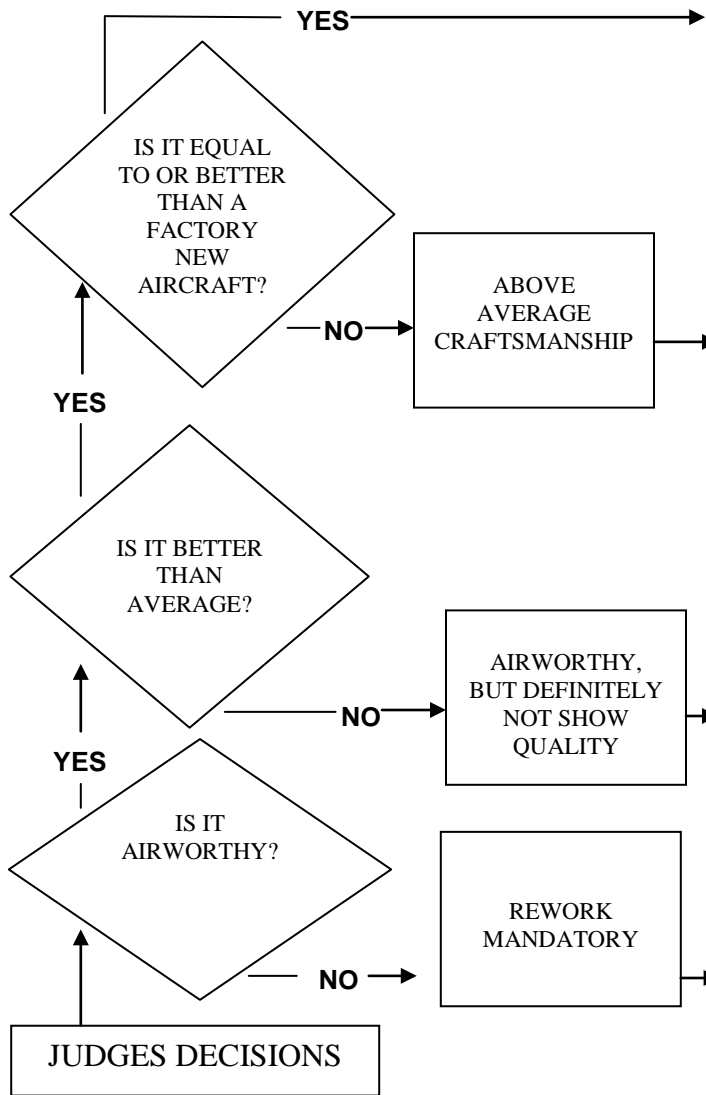
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AIRCRAFT JUDGING SCORING DECISION TREE



JUDGE'S 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



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 fly-in 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: Warbirds@eaa.org and EAA Warbirds website: www.warbirds-eaa.org

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

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 paint 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 1-10 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	L-1, L-2, L-5, L-18, PT-19, PT-22,
2	BT-13, Stearman, N3N, L-13, L-19/O-1, LC-126, O-1, T-41
3	T-34, O-2, Yak-52/CJ-6, F4B/P-12
4	T-6, F-3F, J2F, O2U, P-26, C-45, UC-78
5	P-51, Hellcat, Wildcat, P-40, P-39, P-63, Bearcat, Spitfire, AT-11
6	TBM, P-47, T-28, Vampire, Pinto Jet, L-29, Tigercat, Fouga
7	Corsair, Sea Fury, T-33, T-37, L-39, Firefly, Tudor
8	Skyraider, P-38, P-82, Panther, F-86, P-80, T-38, B-25, C-47, A-4, A-26
9	B-26, A-20, PB4Y, C-46, F-4, B-23, C-117, Ju-52
10	B-17, B-24, B-29, B-50, C-54, C-69, C-118, C-121

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
Fuselage: 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
Landing Gear and Wheel Wells: 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
Engine and Accessory Section: 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 1-5 pts. Cockpit 1-5 pts. Engine, prop, accessory section 1-5 pts. Airframe Components (wings, cowls, fairings, etc.) 1-5 pts.	20
Depth of Restoration: This category will evaluate how far down the aircraft was taken during its restoration and how well this was documented.	10
Difficulty Points: 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 +4 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*

Reserve Grand Champion Warbird*
Reserve Grand Champion Post-WWII Warbird*

Returning Grand Champion WWII
Returning Grand Champion Post-WWII

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

Phoenix Award
Most Authentic
Judges Choice
Preservation

**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.

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 previous awards. Furthermore, should three Warbird aircraft of a type not previously listed (i.e. P-40) be present and eligible for judging, then an award will be given for Best of that Type.

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.

NOTES

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