

PERATURAN DIREKTUR JENDERAL PERHUBUNGAN UDARA
NOMOR : KP 171 TAHUN 2017

TENTANG

PETUNJUK TEKNIS PERATURAN KESELAMATAN PENERBANGAN SIPIL
BAGIAN 21-02 (*STAFF INSTRUCTION CASR 21-02*) TENTANG SERTIFIKAT
KELAIKUDARAAN UNTUK PESAWAT UDARA DAN PERSETUJUAN YANG
BERKAITAN (*AIRWORTHINESS CERTIFICATION OF AIRCRAFT
AND RELATED PRODUCTS*)

DENGAN RAHMAT TUHAN YANG MAHA ESA

DIREKTUR JENDERAL PERHUBUNGAN UDARA,

- Menimbang :
- a. bahwa dalam rangka mengatur mengenai sertifikat kelaikudaraan untuk pesawat udara dan persetujuan yang berkaitan, telah ditetapkan Peraturan Direktur Jenderal Perhubungan Udara Nomor KP 275 Tahun 2015 tentang Petunjuk Teknis Peraturan Keselamatan Penerbangan Sipil Bagian 21-02 (*Staff Instruction CASR 21-02*) Tentang Sertifikat Kelaikudaraan Untuk Pesawat Udara dan Persetujuan Yang Berkaitan (*Airworthiness Certification of Aircraft And Related Products*) sebagai tindak lanjut dari Peraturan Menteri Perhubungan Nomor PM 98 Tahun 2015 tentang Peraturan Keselamatan Penerbangan Sipil Bagian 21 (*Civil Aviation Safety Regulation Part 21*) Tentang Prosedur Sertifikasi Untuk Produk dan Bagian-Bagiannya (*Certification Procedures For Product And Parts*);
 - b. bahwa untuk melakukan pembaruan sesuai dengan standar internasional penerbangan sipil, perlu dilakukan pencabutan terhadap Peraturan Direktur Jenderal Perhubungan Udara Nomor KP 275 Tahun 2015 tentang Petunjuk Teknis Peraturan Keselamatan Penerbangan Sipil Bagian 21-02 (*Staff Instruction CASR 21-02*) Tentang Sertifikat Kelaikudaraan Untuk Pesawat Udara dan Persetujuan Yang Berkaitan (*Airworthiness Certification of Aircraft And Related Products*) untuk menyesuaikan dengan perubahan keempat *Staff Instruction CASR* dimaksud;

- c. bahwa untuk melaksanakan ketentuan sebagaimana dimaksud pada huruf a dan huruf b, perlu menetapkan Peraturan Direktur Jenderal Perhubungan Udara tentang Petunjuk Teknis Peraturan Keselamatan Penerbangan Sipil Bagian 21-02 (*Staff Instruction CASR 21-02*) Tentang Sertifikat Kelaikudaraan Untuk Pesawat Udara dan Persetujuan Yang Berkaitan (*Airworthiness Certification of Aircraft And Related Products*);

- Mengingat :
1. Undang-Undang Nomor 1 Tahun 2009 tentang Penerbangan (Lembaran Negara Republik Indonesia Tahun 2009 Nomor 1, Tambahan Lembaran Negara Republik Indonesia Nomor 4956);
 2. Peraturan Presiden Nomor 7 Tahun 2015 tentang Organisasi Kementerian Negara (Lembaran Negara Republik Indonesia Tahun 2015 Nomor 8);
 3. Peraturan Presiden Nomor 40 Tahun 2015 tentang Kementerian Perhubungan (Lembaran Negara Republik Indonesia Tahun 2015 Nomor 75);
 4. Peraturan Menteri Perhubungan Nomor PM 98 Tahun 2015 tentang Peraturan Keselamatan Penerbangan Sipil Bagian 21 (*Civil Aviation Safety Regulation Part 21*) Tentang Prosedur Sertifikasi Untuk Produk dan Bagian-Bagiannya (*Certification Procedures For Product And Parts*);
 5. Peraturan Menteri Perhubungan Nomor PM 189 Tahun 2015 tentang Organisasi dan Tata Kerja Kementerian Perhubungan sebagaimana telah diubah terakhir dengan Peraturan Menteri Perhubungan Nomor PM 86 Tahun 2016;
 6. Peraturan Direktur Jenderal Perhubungan udara Nomor KP 550 Tahun 2015 tentang Petunjuk Teknis (*Staff Instruction Form - 01*) Tentang Manual Formulir Yang Digunakan Oleh Direktorat Kelaikan Udara dan Pengoperasian Pesawat Udara (*Directorate Airworthiness And Civil Aviation Form Manual (DAAO Form Manual)*);

MEMUTUSKAN

- Menetapkan : PERATURAN DIREKTUR JENDERAL PERHUBUNGAN UDARA TENTANG PETUNJUK TEKNIS PERATURAN KESELAMATAN PENERBANGAN SIPIL BAGIAN 21-02 (*STAFF INSTRUCTION CASR 21-02*) TENTANG SERTIFIKAT KELAIKUDARAAN UNTUK PESAWAT UDARA DAN PERSETUJUAN YANG BERKAITAN (*AIRWORTHINESS CERTIFICATION OF AIRCRAFT AND RELATED PRODUCTS*).

Pasal 1

Memberlakukan Petunjuk Teknis Peraturan Keselamatan Penerbangan Sipil Bagian 21-02 (*Staff Instruction CASR 21-02*) Tentang Sertifikat Kelaikudaraan Untuk Pesawat Udara dan Persetujuan Yang Berkaitan (*Airworthiness Certification of Aircraft And Related Products*) sebagaimana tercantum dalam Lampiran yang merupakan bagian tak terpisahkan dari Peraturan ini.

Pasal 2

Pada saat Peraturan ini mulai berlaku, Peraturan Direktur Jenderal Perhubungan Udara Nomor KP 275 Tahun 2015 tentang Petunjuk Teknis Peraturan Keselamatan Penerbangan Sipil Bagian 21-02 (*Staff Instruction CASR 21-02*) Tentang Sertifikat Kelaikudaraan Untuk Pesawat Udara dan Persetujuan Yang Berkaitan (*Airworthiness Certification of Aircraft And Related Products*), dicabut dan dinyatakan tidak berlaku.

Pasal 3

Direktur Kelaikudaraan dan Pengoperasian Pesawat Udara mengawasi pelaksanaan Peraturan ini.

Pasal 4

Peraturan ini mulai berlaku sejak tanggal ditetapkan.

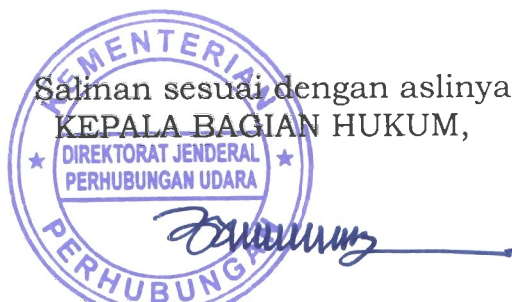
Ditetapkan di : JAKARTA
Pada tanggal : 17 Juli 2017

DIREKTUR JENDERAL PERHUBUNGAN UDARA

ttd

Dr. Ir. AGUS SANTOSO, M. Sc

Salinan sesuai dengan aslinya
KEPALA BAGIAN HUKUM,
DIREKTORAT JENDERAL
PERHUBUNGAN UDARA



ENDAH PURNAMA SARI

Pembina (IV/a)

NIP. 19680704 199503 2 001

Staff Instruction

SI 21 – 02

Airworthiness Certification of Aircraft And
Related Product

Edition : 1
Amendment : 0
Date :

REPUBLIC OF INDONESIA – MINISTRY OF TRANSPORTATION
DIRECTORATE GENERAL OF CIVIL AVIATION
JAKARTA – INDONESIA

FOREWORD

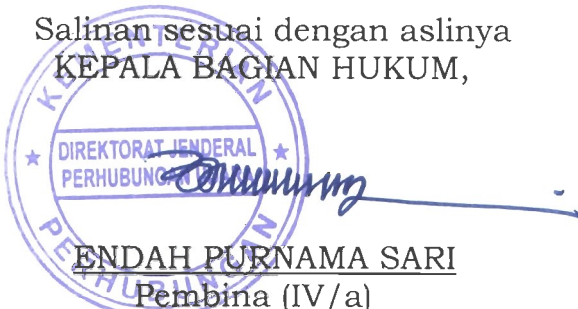
1. PURPOSE : This Staff Instruction has been prepared to guide and assist all Directorate of Airworthiness and Aircraft Operations personnel in properly discharging their responsibilities and efficiently accomplishing their assigned tasks.
2. REFERENCES : This Staff Instruction should be used in accordance with the applicable regulations.
3. CANCELLATION : Staff Instruction Number 21-02 Amendment 2, dated 8 April 2015 has been canceled.
4. AMENDMENT : The revision of this Staff Instruction hand-book is delegated to Director of Airworthiness and Aircraft Operations, Directorate General of Civil Aviation.

DIREKTUR JENDERAL PERHUBUNGAN UDARA

ttd

Dr. Ir. AGUS SANTOSO, M. Sc

Salinan sesuai dengan aslinya
KEPALA BAGIAN HUKUM,



ENDAH PURNAMA SARI
Pembina (IV/a)

NIP. 19680704 199503 2 001

TABLE OF CONTENTS

FOREWORD	i
TABLE OF CONTENTS.....	ii
CHAPTER 1 INTRODUCTION	1
100. AUTHORITY.....	1
101. DEVIATIONS.....	1
102. RESPONSIBILITY FOR ISSUANCES AND REVISION.....	1
103. CANCELLATION.....	1
104. ABBREVIATIONS.....	1
105. DEFINITION OF TERMS.....	2
CHAPTER 2 GENERAL POLICIES AND PROCEDURES	4
SECTION 1 GENERAL INFORMATION	4
200. INTERPRETATION OF THE TERM “AIRWORTHY”	4
201. DGCA REPRESENTATIVES.....	4
202. RESPONSIBILITIES OF DGCA INSPECTORS AND DESIGNEES ..	4
203. POSSESSION AND DISPLAY OF AIRWORTHINESS CERTIFICATES	5
204. AIRCRAFT REGISTRATION	5
205. AIRCRAFT NATIONALITY AND REGISTRATION MARKS.....	5
206. RESERVED	6
207. ORIGINAL AND REPLACEMENT AIRCRAFT IDENTIFICATION PLATE	6
208-210. RESERVED	7
211. BANNER TOWING	7
212. RESERVED	7
SECTION 2 AIRWORTHINESS CERTIFICATES AND CERTIFICATIONS.....	9
213. GENERAL.....	9
214. CLASSIFICATION AND CATEGORY OF AIRWORTHINESS CERTIFICATES.....	9
215. REPLACEMENT OR AMENDMENT OF AIRWORTHINESS CERTIFICATES.....	9
216. SURRENDERED AIRWORTHINESS CERTIFICATE.....	10
217. AIRCRAFT MODEL CHANGE.....	11
218. SAFEGUARDING DGCA AIRWORTHINESS CERTIFICATES	11
219. RECORDING OF CONFORMITY INSPECTIONS	11
220. AIRWORTHINESS CERTIFICATION OF MANNED FREE BALLOONS.....	12
221. RESERVED	12

SECTION 3 INITIAL OR SUBSEQUENT ISSUANCE OF AIRWORTHINESS CERTIFICATES (ORIGINAL/RECURRENT) OR RELATED APPROVALS.....	13
222. GENERAL.....	13
223. AIRWORTHINESS CERTIFICATION.....	13
224. EXCEPTIONS	15
225. RECORDING OF CONFORMITY INSPECTIONS	15
CHAPTER 3 STANDARD AIRWORTHINESS CERTIFICATION.....	16
SECTION 1 GENERAL INFORMATION	16
300. GENERAL.....	16
301. STANDARD AIRWORTHINESS CERTIFICATE	16
302. APPLICATION FOR AIRWORTHINESS CERTIFICATE, DAAO FORM No. 21-21.....	17
303. STATEMENT OF CONFORMITY, DAAO FORM No. 21-07	17
304. USE OF PARTS CATALOGS AND MAINTENANCE MANUALS.....	17
305. BASIC ELIGIBILITY REQUIREMENTS.....	18
306. CERTIFICATION PROCEDURE	18
307-308. RESERVED.....	20
SECTION 2 NEW AIRCRAFT	21
309. GENERAL.....	21
310. RESERVED.....	21
311. CERTIFICATION PROCEDURES.....	21
312. AIRCRAFT MANUFACTURED WITHOUT DGCA PRODUCTION APPROVAL (PRODUCTION UNDER TC).....	21
313. AIRCRAFT MANUFACTURED UNDER A PRODUCTION CERTIFICATE (PC)	22
314. RESERVED	22
315. AIRWORTHINESS CERTIFICATION OF VERY LIGHT AIRCRAFT (VLA).....	22
316. AIRCRAFT MANUFACTURED IN A BILATERAL COUNTRY.....	22
317. NEW AIRCRAFT MANUFACTURED UNDER THE PROVISIONS OF CASR PART 21 SEC. 21.6(b).....	23
318. RESERVED	27
SECTION 3 USED AIRCRAFT.....	28
319. GENERAL.....	28
320. CERTIFICATION PROCEDURES	28
321. CONFORMITY DETERMINATION - USED AIRCRAFT.....	28
322. FLIGHT TESTING.....	29
323. ISSUANCE OF STANDARD AIRWORTHINESS CERTIFICATES UNDER CASR PART 21 SEC. 21.183(d) - USED AIRCRAFT.....	29
CHAPTER 4 SPECIAL CLASSIFICATION - AIRWORTHINESS CERTIFICATION.....	31
SECTION 1. GENERAL INFORMATION.....	31

4000.	GENERAL	31
4001.	APPLICATION FOR AIRWORTHINESS CERTIFICATE, DAAO FORM NO. 21-21	31
4002.	CERTIFICATION PROCEDURES	31
4003.	SPECIAL AIRWORTHINESS CERTIFICATES.....	33
4004.	RESERVED	33
SECTION 2. RESTRICTED AIRWORTHINESS CERTIFICATION		34
4005.	GENERAL.....	34
4006.	CERTIFICATION PROCEDURES	34
4007.	ELIGIBILITY.....	34
4008.	SPECIAL PURPOSE OPERATIONS.....	35
4009.	STATEMENT OF CONFORMITY, DAAO FORM NO. 21-07	35
4010.	OPERATING LIMITATIONS	36
4011.	AGRICULTURAL AIRCRAFT	36
4012.	AIRWORTHINESS CERTIFICATE	36
4013.	DISPLAY OF MARKS (RESTRICTED)	38
4014-4015.	RESERVED.....	38
SECTION 3 MULTIPLE AIRWORTHINESS CERTIFICATION		39
4016.	GENERAL.....	39
4017.	CERTIFICATION PROCEDURES	39
4018.	ELIGIBILITY.....	39
4019.	SPECIAL PURPOSE OPERATIONS.....	40
4020.	AIRWORTHINESS CERTIFICATES.....	40
4021.	OPERATING LIMITATIONS	40
4022.	OPERATION WITH MULTIPLE AIRWORTHINESS CERTIFICATIONS (STANDARD AND RESTRICTED).....	41
4023.	DISPLAY OF MARKS ("RESTRICTED" OR "LIMITED")	41
4024-4026.	RESERVED.....	41
SECTION 4 LIMITED AIRWORTHINESS CERTIFICATION		42
4027.	GENERAL.....	42
4028.	CERTIFICATION PROCEDURES	42
4029.	ELIGIBILITY.....	42
4030.	OPERATING LIMITATIONS	43
4031.	DISPLAY OF MARKS (LIMITED).....	43
4032-4033.	RESERVED.....	43
SECTION 5 RESERVED		44
4034-4037.	RESERVED.....	44
SECTION 6 LIGHT-SPORT CATEGORY AIRCRAFT AIRWORTHINESS CERTIFICATIONS		45
4038.	GENERAL.....	45
4039.	CERTIFICATION PROCEDURES	49

4040.	PROTOTYPE AND PRODUCTION FLIGHT TESTING	52
4041.	FLIGHT TEST AREAS.....	53
4042.	SPECIAL FLIGHT PERMIT FOR FLIGHT TESTING LIGHT-SPORT AIRCRAFT CATEGORY OPERATING LIMITATIONS	54
4043.	ISSUANCE OF LIGHT-SPORT CATEGORY AIRCRAFT OPERATING LIMITATIONS	55
4044.	LIGHT-SPORT AIRCRAFT STATEMENT OF COMPLIANCE.....	57
4045-4070.	RESERVED.....	57
	SECTION 7 EXPERIMENTAL CERTIFICATES.....	58
4071.	GENERAL.....	58
4072.	ELIGIBILITY.	60
4073.	RESERVED	61
4074.	RESERVED	61
4075.	FLIGHT TEST AREAS.....	61
4076.	OPERATION OUTSIDE FLIGHT TEST AREAS	63
4077-4080.	RESERVED.....	63
	SECTION 8 EXPERIMENTAL LIGHT-SPORT AIRCRAFT AIRWORTHINESS CERTIFICATIONS	64
4081.	GENERAL.....	64
4082.	CERTIFICATION PROCEDURES	67
4083.	FLIGHT TEST AREAS.....	69
4084.	ISSUANCE OF EXPERIMENTAL LIGHT-SPORT OPERATING LIMITATIONS	70
4085-4095.	RESERVED.....	75
	SECTION 9 EXPERIMENTAL AMATEUR-BUILT AIRCRAFT AIRWORTHINESS CERTIFICATION.....	76
4096.	GENERAL.....	76
4097.	ELIGIBILITY.....	76
4098.	DETERMINATION OF THE MAJOR PORTION	77
4099.	DESIGN AND CONSTRUCTION	78
4100.	KIT EVALUATION	80
4101.	ADVISING APPLICANTS	80
4102.	CERTIFICATION PROCEDURE	82
4103.	FLIGHT TEST AREAS	84
4104.	ISSUANCE OF EXPERIMENTAL AMATEUR-BUILT OPERATING LIMITATIONS	85
4105-4106.	RESERVED.....	89
	SECTION 10. CERTIFICATION AND OPERATION OF AIRCRAFT UNDER THE EXPERIMENTAL PURPOSE(S) OF EXHIBITION AND AIR RACING	90
4107.	GENERAL.	90
4108-4010.	RESERVED	90
4111.	SPECIAL CERTIFICATION REQUIREMENTS.	90

4112. CERTIFICATION PROCEDURES.....	91
4113. ISSUANCE OF EXPERIMENTAL EXHIBITION AND AIR RACING OPERATING LIMITATIONS.....	92
4114-4124. RESERVED.....	95
SECTION 11. CERTIFICATION AND OPERATION OF AIRCRAFT UNDER THE EXPERIMENTAL PURPOSE(S) OF RESEARCH AND DEVELOPMENT, SHOWING COMPLIANCE WITH REGULATIONS, CREW TRAINING, MARKET SURVEYS AND OPERATING KIT-BUILT AIRCRAFT.....	96
4125. GENERAL.....	96
4126. RESERVED.....	97
4127. PC HOLDER AND MODIFIER EXPERIMENTAL OPERATING PROCEDURE.....	97
4128. ISSUANCE OF EXPERIMENTAL RESEARCH AND DEVELOPMENT, SHOWING COPLIANCE WITH REGULATIONS, CREW TRAINING, MARKET SURVEYS, AND OPERATING LIMITATIOIS.....	99
4129-4135. RESERVED.....	102
SECTION 12. PROVISIONAL AIRWORTHINESS CERTIFICATION.....	103
4136. GENERAL.....	103
4137. ELIGIBILITY.....	103
4138. SPECIAL PURPOSE OPERATIONS.....	103
4139. STATEMENT OF CONFORMITY, DAAO FORM NO. 21-07.....	103
4140. CERTIFICATION PROCEDURES.....	103
4141. SPECIAL AIRWORTHINESS CERTIFICATE, DAAOFORM 21-24.....	103
4142. OPERATING LIMITATIONS.....	104
4143-4160. RESERVED.....	104
SECTION 13. SPECIAL FLIGHT PERMIT.....	105
4161. GENERAL.....	105
4162. PURPOSES.....	105
4163. APPLICATION AND ISSUANCE - GENERAL.....	106
4164. AIRCRAFT INSPECTION.....	106
4165. SPECIAL OPERATING LIMITATIONS.....	107
4167. SPECIAL FLIGHT PERMIT FOR PRODUCTION FLIGHT TESTING....	110
4168. SPECIAL FLIGHT PERMIT FOR CONDUCTIN CUSTOMER DEMONSTRATION FLIGHT.....	111
4169. RESERVED.....	112
CHAPTER 5. EXPORT APPROVAL PROCEDURES.....	116
SECTION 1. GENERAL INFORMATION.....	116
500. GENERAL.....	116
501-504. RESERVED.....	116
SECTION 2. EXPORT APPROVALS.....	117

505. ELIGIBILITY	117
506. EXPORT AIRWORTHINESS APPROVALS.....	117
507. APPLICATION.....	118
508. ISSUANCE OF DAAO FORM NO. 21-22 EXPORT CERTIFICATE OF AIRWORTHINES, FOR AIRCRAFT.	118
509. ISSUANCE OF DAAO FORM NO. 21-18, AIRWORTHINESS RELEASE CERTIFICATE, FOR ENGINES, PROPELLERS, AND ARTICLES.....	118
510. RESPONSIBILITIES OF EXPORTERS (CASR Part 21 sec. 21.333).....	119
511. DETERMINATION OF “NEW” AND “USED” PRODUCTS OR ARTICLES.....	119
512. PROCESSING AND PREPARATION OF EXPORT C OF A.....	119
513. APPROVAL OF MODIFICATIONS.	122
514. RESERVED	123
515. ROUTING AND PROCESSING OF EXPORT FILES.....	123
516. ISSUANCE OF EXPORT CERTIFICATE OF AIRWORTHINESS FOR AIRCRAFT TYPE CERTIFICATED IN MULTIPLE CATEGORIES. (NORMAL AND RESTRICTED).	123
517. ISSUANCE OF EXPORT C OF A FOR RESTRICTED CATEGORY AIRCRAFT.	123
518. RESERVED	124
CHAPTER 6. IMPORT PROCEDURES.....	125
SECTION 1. GENERAL INFORMATION.....	125
600. GENERAL.....	125
601-602. TO BE DETERMINED.....	126
SECTION 2. IMPORT AIRCRAFT	127
603. REQUIREMENTS FOR ROI AIRWORTHINESS CERTIFICATION.....	127
604. APPLICATION.....	128
605. AIRWORTHINESS DETERMINATION.	128
606. RESERVED.....	129
607. CERTIFICATION PROCEDURES.....	129
608-609.RESERVED.....	129
SECTION 3. AIRCRAFT ENGINES, PROPELLERS AND ARTICLES	130
610. AIRWORTHINESS DETERMINATION.	130
611. IDENTIFICATION AND MARKING.....	131
612. RETURN TO SERVICE.....	131
613. RESERVED.....	131
CHAPTER 7. SPECIAL FLIGHT AUTHORIZATIONS (SFA) FOR FOREIGN REGISTERED CIVIL AIRCRAFT	132
700. GENERAL.....	132
701. ELIGIBILITY.....	132
702. BLANKET SFA.....	133
703. APPLICATION.....	133

704. ISSUANCE OR ACCEPTANCE	134
705. DURATION.....	134
706. OPERATING LIMITATIONS.....	135
CHAPTER 8. PROCESSING FORMS, REPORTS, AND CERTIFICATION FILES....	156
800. GENERAL.....	156
801. REVIEW AND COMPLETION of DAAO FORM NO. 21-21.....	156
802. REVIEW AND COMPLETION OF DAAO FORM NO. 21-40, INSPECTION RECORD ISSUANCE OF (ORIGINAL) AIRWORTHINESS CERTIFICATE.....	165
803. COMPLETION OF STANDARD AIRWORTHINESS CERTIFICATE, DAAO FORM NO. 21-20.....	171
804. COMPLETION OF SPECIAL AIRWORTHINESS CERTIFICATE, DAAO FORM NO. 21-24.....	171
805. INSTRUCTIONS FOR REVIEWING A COMPLETED DAAO FORM NO. 21- 41, LIGHT-SPORT STATEMENT OF COMPLIANCE.....	173
806. INSTRUCTION FOR VERIFYING THE APPLICANT'S ENTRIES AND COMPLETING DAAO FORM NO. 21-19, APPLICATION EXPORT C OF A.....	175
807. EXAMINATION, REVIEW, AND ROUTING OF CERTIFICATION FILES.....	177

CHAPTER 1 INTRODUCTION

100. AUTHORITY.

The applicable sections of the Civil Aviation Safety Regulations which, in turn, are based on the Indonesia Aviation Act No. 1 of 2009 provide the basis for the procedures in this Staff Instruction.

101. DEVIATIONS.

Depending upon the nature of the particular problem or job, it may sometimes become necessary to deviate from the policies and procedures outlined in this Staff Instruction. When a deviation becomes necessary, the DGCA Inspector involved should be guided by sound judgment, making certain that all deviations are substantiated, documented, and concurred in by his Deputy Director. Substantial deviations from these instructions must be approved by the Director of Airworthiness Certification and Aircraft Operations, in order to insure uniform administration.

102. RESPONSIBILITY FOR ISSUANCES AND REVISION.

The issuance, revision, or cancellation of material in this Staff Instruction is the responsibility of the DGCA. All changes will be accomplished to provide for original and recurrent airworthiness certification and related approvals of eligible aeronautical products. All interested personnel are invited to submit comments or new material which may be considered useful in this Staff Instruction. Such recommendations should be forwarded through channels to the Deputy Director. Recommendations should clearly identify the purpose and substance of the change along with adequate justification for the recommended change.

103. CANCELLATION.

Staff Instruction 21-02 Amendment 2, Airworthiness Certification and Related Product, dated 27 June 2008, is cancelled upon the effective date of this Staff Instruction.

104. ABBREVIATIONS.

AC	Advisory Circular
AD	Airworthiness Directive
CAA	Civil Aviation Authority
CAR	Civil Aviation Regulation
C of A	Certificate of Airworthiness
CASR	Civil Aviation Safety Regulation
CIR	Conformity Inspection Record
DAAO	Directorate of Airworthiness and Aircraft Operations
DGCA	Directorate General of Civil Aviation
DMIR	Designated Manufacturing Inspection Representative
LSA	Light Sport Aircraft

ICAO	International Civil Aviation Organization
N/A	Not Applicable
PAH	Production Approval Holder
PC	Production Certificate
PMA	Parts Manufacturer Approval
ROI	Republic of Indonesia
SDE	Sub Directorate of Engineering
SDAP	Sub Directorate of Aeronautical Product
SDM	Sub Directorate of Maintenance
SDFO	Sub Directorate of Flight Operation
STC	Supplemental Type Certificate
TC	Type Certificate
TSO	Technical Standard Order
TSOA	Technical Standard Order Authorization

105. DEFINITION OF TERMS.

- a. Aircraft Classification. The term "Classification", as used with respect to the certification of aircraft, means a broad grouping of aircraft having similar characteristics of propulsion, flight, or landing. Examples include: Airplane, Rotorcraft, Glider, Balloon, Landplane, and Seaplane (Reference CASR Part 1).
- b. Aircraft Category. The term "Category", as used with respect to the certification of aircraft, means a grouping of aircraft based upon its intended use or operating limitations. Examples include: Normal, Utility, Acrobatic, Transport, Limited, Restricted, and Provisional (Reference CASR Part 1). For purposes in this order, gliders and balloons will be referred to as categories in lieu of classifications.
- c. Amateur-Built Aircraft. Sometimes referred to as home-built aircraft. These aircraft have been issued an experimental certificate under CASR 21.191(g).
- d. Authorized Instructor. A person who holds a valid ground instructor certificate under CASR part 61 or part 142, or a person who holds a current flight instructor certificate issued under part 61.
- e. Classification of Airworthiness Certificates. The term "Classification" is also used to distinguish the two certification processes and certificates; i.e., standard and special.
- f. Category of Special Airworthiness Certificates. The term "Category" is also used to identify the five specific certification processes and certificates issued as Special Airworthiness Certificates.
- g. Exemption. Approval to be free from current regulations in CASR.
- h. Experimental Light-Sport Aircraft. An aircraft issued an experimental operating light- sport category aircraft airworthiness certificate. Experimental light-sport aircraft applies to those aircraft for which the certificate is issued regardless of the purpose within CASR 21.191(i), Operating light-sport aircraft.

- i. Fireproof.
 - (1) With respect to materials and parts used to confine fire in a designated fire zone, means the capacity to withstand at least as well as steel in dimensions appropriate for the purpose for which they are used, the heat produced when there is a severe fire of extended duration in that zone.
 - (2) With respect to other materials and parts, means the capacity to withstand the heat associated with fire at least as well as steel in dimensions appropriate for the purpose for which they are used.

- j. Flight Safety-Critical Aircraft Part. Any part, assembly, or installation containing a critical characteristic whose failure, malfunction, or absence could cause,
 - (1) A catastrophic failure resulting in loss or serious damage to the aircraft, or
 - (2) An un-commanded engine shutdown resulting in an unsafe condition.

- k. Light-Sport Aircraft. A category of simple, very basic, small, lightweight, low-performance aircraft, it is an aircraft other than a helicopter or powered-lift.

- l. Light-Sport Category. With respect to aircraft certification, the light-sport category adds a new group of aircraft based on the definition in CASR part 1 sec. 1.1, limiting size, weight, and speed, and how the aircraft is equipped. This category contains four classes of aircraft: airplanes and gliders, powered parachutes, weight-shift-control, and lighter-than-air aircraft.

- m. Light-Sport Eligible Kit. An eligible kit is one that is of the same make and model aircraft that has been issued a light-sport category airworthiness certificate by the DGCA. The kit is manufactured by the same entity that built the aircraft, and that aircraft has been issued the LSA airworthiness certificate. Once built, the owner-assembled kit aircraft is eligible for the experimental, operating LSA certificate.

- n. Manufacturer. A person who causes a product or part thereof to be produced.

- o. Part Out. To remove a part from or disassemble an aircraft, engine, propeller, or assembly of parts.

- p. Production Approval Holder. A holder of a production certificate (PC), a parts manufacturer approval (PMA), or a technical standard Staff Instruction (TSO) authorization whose controls the design and quality of a product or part thereof.

- q. Statement of Compliance. A statement of compliance (SOC) is a signed statement made by the aircraft manufacturer stating that the aircraft (specific by serial number) was designed, manufactured, and is supported with a monitoring and correction of safety-of-flight within a continued airworthiness system in accordance with the appropriate consensus standards.

CHAPTER 2 GENERAL POLICIES AND PROCEDURES

SECTION 1 GENERAL INFORMATION

200. INTERPRETATION OF THE TERM “AIRWORTHY”.

The term “airworthy” is defined in CASR Part 1. Two conditions that must be met for an aircraft to be considered “airworthy”, CASR 21.183(a), (b), and (c) state that the two conditions necessary for issuance of an airworthiness certificate:

- a. The aircraft must conform to its TC. Conformity to type design is considered attained when the aircraft configuration and the components installed are consistent with the drawings, specifications, and other data that are part of the TC, which includes any supplemental type certificate (STC) and field approved alterations incorporated into the aircraft.
- b. The aircraft must be in a condition for safe operation. This refers to the condition of the aircraft relative to wear and deterioration, for example, skin corrosion, window delamination/crazing, fluid leaks, and tire wear.

NOTE: If one or both of these conditions are not met, the aircraft would be considered un-airworthy. Aircraft that have not been issued a TC must meet the requirements of paragraph 200b above.

201. DGCA REPRESENTATIVES

The DGCA is authorized under CASR part 183, to designate private persons or organizations to act as representatives of the DGCA. A designated manufacturing inspection representative (DMIR), may issue airworthiness approvals for aircraft engine, propeller and articles, and may perform certain other examinations, inspections, and testing services relative to certification functions in the areas of manufacturing. Manufacturing inspector functions will be delegated to the fullest extent practical, but not to the extent an advisor’s technical skills are jeopardized. The designee’s Certificate of Authority DAAO Form No. 183-2 must specify the type and limitation of authority granted.

202. RESPONSIBILITIES OF DGCA INSPECTORS AND DESIGNEES.

- a. The procedures in this staff instruction cover original airworthiness certification, for which manufacturing inspectors are primarily responsible, and recurrent airworthiness certification, for which maintenance inspectors are primarily responsible. Manufacturing and maintenance inspector may assist each other by mutual agreement.
- b. DGCA designees are responsible to the DGCA for determining that the products or articles submitted to conform to the approved design, are in condition for safe operation, and meet other pertinent requirements. Within their limits of authority, they are also responsible for the completeness, accuracy, and processing of all

official documents and paperwork as provided for in this Staff Instruction. All actions taken by the designated representatives on behalf of the DGCA are subject to the monitoring, review, and approval by the responsible DGCA manufacturing inspector.

- c. Manufacturing inspectors are responsible, within their jurisdiction, for the proper training of designated industry personnel upon their appointment, regarding airworthiness certification procedures and related paper works. This responsibility also includes the determination that such designees have been provided with appropriate regulations, instructions, and forms necessary for the performance of their designated duties.
- d. Within their respective areas of responsibility, DGCA manufacturing inspectors will maintain supervision and surveillance over the airworthiness certification activities accomplished by designees to ensure that all certifications and approvals are in compliance with the applicable rules, policies, and procedures. This includes the checking of certification files and related documents for accuracy, completeness, and assurance of product eligibility.

203. POSSESSION AND DISPLAY OF AIRWORTHINESS CERTIFICATES.

The standard and/or special airworthiness certificate issued to a R.O.I. registered civil aircraft must be displayed at the cabin or cockpit entrance so that the certificate(s) is legible to passengers or crew (Reference CASR part 91, General Operating and Flight Rules section 91.203(b)).

204. AIRCRAFT REGISTRATION.

- a. Registration. The procedures for aircraft registration and issuance of nationality and registration mark are contained in CASR Part 47. The registration of aircraft is not a function of airworthiness certification; however, possession of a Certificate of Aircraft Registration is a prerequisite for issuance of an airworthiness certificate. The DGCA must ensure that an aircraft presented for airworthiness certification is properly registered (CASR Part 21 sec. 21.173).
- b. Proof of Ownership. The applicant for registration of an aircraft must submit proof of ownership that meets the requirements prescribed in CASR Part 47.

205. AIRCRAFT NATIONALITY AND REGISTRATION MARKS

- a. Registration Marks. All aircraft registered in the Republic of Indonesia shall display the letter "PK" followed by the registration Mark according to the applicable requirements of CASR Part 45.23.
- b. Size of Registration Marks
 - (1) Nationality and registration marks displayed on all aircraft, must be at least 50 centimeters (20) inches and 30 centimeters (12 inches) high in accordance with CASR part 45 sec. 45.29.
 - (2) DGCA inspectors should be alert for newly repainted aircraft registration marks and ensure the marking is consistent with

CASR part 45 sec. 45.29. An enforcement action should be initiated against the aircraft owner/operator whenever an DGCA inspector finds that an aircraft has not been marked with 50-inch and 12-inch-high registration marks in accordance with CASR part 45 sec. 45.29(b).

- (3) Nationality and registration marks of at least 20 inches high also may be displayed on airships, spherical balloons, non-spherical balloons, in accordance with CASR part 45 sec. 45.29.
- (4) When marks include the Roman capital letter "PK" and the registration marks is displayed on limited, restricted, light-sport, experimental, or provisionally certificated aircraft, the operator must also display on that aircraft near each entrance to the cabin, cockpit, or pilot station, in letters not less than 2 inches nor more than 6 inches high the words "limited", "restricted", "light-sport", "experimental", or "provisional", as applicable per CASR part 45 sec. 45.23.

206. RESERVED

207. ORIGINAL AND REPLACEMENT AIRCRAFT IDENTIFICATION PLATE.

- a. Original Data Plates. Each aircraft presented for airworthiness certification must meet the requirements of CASR part 21 sec. 21.182. Each aircraft, aircraft engine, propeller, propeller blade, or propeller hub manufactured under a type or production certificate, or an aircraft to be certificated as an amateur built or LSA must be with the information specified in sec. 45.13. Manned free balloons are required to comply with CASR Part 45 sec.45.11(c).
- b. Replacement Data Plates.
 - (1) When DGCA receive inquiries regarding removal or destruction of identification plates, the sample letter in Figure 2-1 may be used as a guide for responding.
 - (2) Prior to issuance of a replacement ID plate, the requester or product manufacturer must first contact the DGCA office to allow the DGCA to determine the validity of the need to replace the ID plate.
 - (3) The DGCA must notify the product manufacturer as to whether or not the request is valid. The DGCA must further authority the requestor to affix the replacement ID plate to the product; as required by CASR part 45 sec. 45.13(c).
 - (4) Upon notification by the DGCA, the product manufacturer may then issue the replacement ID plate.
 - (5) The old ID plate (when available) must be surrendered by the owner with a write statement to the DGCA office who authorized the replacement or the product manufacturer for disposal, as appropriate.
- c. Removal of Data Plate. CASR Part 45 sec. 45.13 permit persons performing maintenance operation under CASR Part 43, Maintenance, Preventive Maintenance, Rebuilding, and Alteration, to remove an aircraft data plate. The removal must be done in accordance with the techniques and practice acceptable to the DGCA. The ID Plate remove may be reinstalled only on the product from which it was removed.

d. Misuse of Data Plates.

- (1) DGCA inspector should be on alert for any indication of ID plate misuse or suspicious activity, such as the building of a complete aircraft by a person performing work under CASR part 43. Installation of an ID plate by a person performing work under CASR part 43, where the ID plate has been purchased or salvaged from another aircraft, is not approved unless written approval is obtained from the DGCA
- (2) Before issuing an airworthiness certificate for an aircraft that appears to be a repair or restoration of an aircraft that previously has been destroyed or demolished, the DGCA inspector should determine whether the serial number of the aircraft on which certification is sought is the serial number of an aircraft previously classified as destroyed or demolished by the DGCA or the NTSC (National Transportation Safety Committee). If the DGCA inspector determines that the ID plate comes from a previously destroyed or demolished aircraft, the DGCA inspector must initiate an investigation to determine whether a violation of CASR part 45 sec. 45.13 has occurred before the airworthiness certificate may be issued. If a violation of CASR part 45 sec. 45.13 is found, the DGCA inspector must deny the airworthiness certificate and initiate an enforcement action.

Note: When the ID plate is surrendered, the ID plate is no longer considered personal property.

208-210. RESERVED

211. BANNER TOWING.

An aircraft that is in full compliance with its type design and has a DGCA-approved banner tow installation and may be operated under a standard airworthiness certificate for banner towing purpose. An aircraft that has a standard airworthiness certificate and is modified for a special purpose operation must be operated under a multiple airworthiness certificate (standard/restricted) when the following condition occurs:

- a. The special purpose modification does not meet the type design.
- b. The special purpose modification is not approved for standard category use.
- c. The aircraft will be operated outside the normal category operating limitations.

212. RESERVED.

Figure 2-1 Sample Response Letter Regarding Identification Plates

March 3, 2013

To: Mr. Sukardi

Building 22 1 floor
Halim PK Airport

Dear Mr. Sukardiman,

This is in response to your letter dated February 14, 2000, concerning disposition of the identification plate from Cessna Model 208B, Registration Marks PK-ABC, Serial No. 208B-12345.

The aircraft will be scrapped as a result of an accident. It is requested that the aircraft registration, airworthiness certificate, identification plate, and a copy of this letter be forwarded to the address listed below.

Directorate General Civil Aviation
Directorate Airworthiness and Aircraft Operations
Jl. Medan Merdeka Barat No. 8
Jakarta

Sincerely,

Deputy Director of Aeronautical Product

SECTION 2 AIRWORTHINESS CERTIFICATES AND CERTIFICATIONS

213. GENERAL.

DAAO Forms No. 21-20 and 21-24 will be referred to as being either Standard or Special Classification within Staff Instruction.

214. CLASSIFICATION AND CATEGORY OF AIRWORTHINESS CERTIFICATES.

- a. Standard Classification. A Standard Airworthiness Certificate, DAAO Form No. 21-20, may be issued for an aircraft that fully complies with all the requirements applicable to: Normal, Utility, Acrobatic, Transport, Commuter, and Balloon categories.
- b. Special Classification. A Special Airworthiness Certificate, DAAO Form No. 21-24 may be issued for an aircraft that does not meet the requirements for a Standard Airworthiness Certificate as follows:
 - (1) Restricted. A Special Airworthiness Certificate may be issued for an aircraft in the restricted category that meets the requirements of CASR section 21.185, "Issue of airworthiness certificates for restricted category aircraft."
 - (2) Limited. A Special Airworthiness Certificate may be issued for an aircraft in the limited category that meets the requirements of CASR section 21.189, "Issue of airworthiness certificates for limited category aircraft."
 - (3) Provisional. A Special Airworthiness Certificate may be issued for an aircraft in the provisional category that meets the applicable requirements of CASR Part 21, Subparts C and I.
 - (4) Light-sport. Aircraft that meets the requirement CASR part 21 sec. 21.190
 - (5) Experimental. A Special Airworthiness Certificate may be issued for experimental purposes for any category aircraft including an amateur-built that meets the requirements of CASR Part 21 sec. 21.191, 21.193, 21.195.
 - (6) Special Flight Permits. A Special Airworthiness Certificate may be issued for an aircraft that may not currently meet applicable airworthiness requirements, but is capable of safe flight, and meets the requirements of CASR sections 21.197 and 21.199.

215. REPLACEMENT OR AMENDMENT OF AIRWORTHINESS CERTIFICATES.

- a. Replacement.
 - (1) DGCA will issue a replacement airworthiness certificate when the original airworthiness certificate is declared lost, mistyping, has been mutilated, is no longer legible, or when the aircraft's registration marks has been legally changed. In this instance, a new application for airworthiness certification is not required. The replacement airworthiness certificate will carry the issue date of the original certificate along with the capital letter "R" in the date of issuance block (e.g., 10 January 2013 (R)).

- (2) Request for a replacement certificate will be made to the DGCA. The registered owner or certificate operator will certify this by submitting a signed statement containing the registration number, serial number, make, and model of the aircraft, and a reason the replacement certificate is needed. Replacement of airworthiness certificates shall not be accomplished by verbal agreement with the assigned inspector or through procedures contained in air carrier's manuals that allow the continued operation of an aircraft without an airworthiness certificate. Such actions are contrary to CASR part 91 sec. 91.203(a), part 121 sec. 121.153(a) (2), and part 135 sec. 135.153 (a)(2).
 - (3) The date of issuance and the airworthiness classification/category of the lost or mutilated certificate must be positively established from the aircraft records or from the remains of the mutilated certificate. Before issuing a replacement certificate, the DGCA inspector shall review the aircraft records, and if necessary, inspect the aircraft to insure the applicant's request is legitimate and the aircraft is eligible for the airworthiness certificate requested. If there is insufficient data upon which to base issuance of the replacement certificate, the DGCA inspector will request copies of the appropriate data, such as the application form.
 - (4) In all situations, a copy of the replacement certificate must be filed to DGCA's permanent aircraft files.
- b. Amendment.
- (1) Either a standard or special airworthiness certificate may be amended under the following situations:
 - (a) A modification, i.e., STC and/or amended TC, that changes the category of the aircraft specified in DAAO Form No. 21-20 Standard Airworthiness Certificate.
 - (b) A change to the "limitations" specified in DAAO Form No. 21-20.
 - (c) A change in the aircraft model specified in DAAO Form No. 21-20.
 - (d) A change in the operating limitations for an aircraft with DAAO Form No. 21-24, Special Airworthiness Certificate.
 - (2) The certificate being amended will display the current date of issuance along with the capital letter "A" in the date of issuance block of the certificate (e.g., 10 January 2013(A)).
 - (3) Any amendment of an airworthiness certificate will require submission of DAAO Form No. 21-21, Application for Airworthiness Certificate. (Reference CASR section 21.177).
 - (4) Paragraph 215 details further information concerning aircraft model changes.

216. SURRENDERED AIRWORTHINESS CERTIFICATE.

- a. Airworthiness certificates voluntarily surrendered by an aircraft owner or operator must be forwarded to DGCA office for retention in the permanent airworthiness files for that aircraft. The certificate will be accompanied by a statement giving the reason for its surrender.

- b. When a R.I.-owned aircraft is sold to a purchaser in another country, or is leased for operations and registered in another country and is removed from R.I. registry, the airworthiness certificate would be invalid and therefore must be surrendered to the DGCA by the aircraft owner or operator as specified in CASR section 21.333(e). The DGCA will advise the exporter of its responsibilities under CASR section 21.333.

217. AIRCRAFT MODEL CHANGE.

- a. When an aircraft has been modified to conform to another model of the same make, the aircraft Airworthiness Registration Certificates and aircraft ID plate must reflect the new model designation.
- b. In addition to the existing identification plate, a new fireproof plate as specified in CASR part 45 sec. 45.13 with the new model designation will be attached near the original as close as physically possible without obscuring it.
- c. On aircraft manufactured before December 27, 1993, the identification plate may be secured at an accessible exterior or interior location near an entrance. If the model designation and builder's serial number are also displayed on the aircraft fuselage exterior then the aircraft must comply with the requirements of CASR section 45.11(d). To maintain an accurate and continuous operating history for the aircraft, the original ID plate must not be altered in any manner.
- d. The normal procedures apply for processing an Application for Airworthiness Certificate, DAAO Form No. 21-21, and for amendment of the Airworthiness Certificate, including applicable inspections. If ownership of the aircraft has not changed, an application for aircraft registration, reflecting the new model designation, should be submitted to DGCA, and DGCA will issue an amended registration certificate based on information from the DGCA Inspector signifying the model change when attached to the application for Airworthiness Certification.

218. SAFEGUARDING DGCA AIRWORTHINESS CERTIFICATES.

Airworthiness certificates are officially formed and must safeguard by those DGCA inspector who are charged with the responsibility for their issuance. At no time may a blank certificate be given to any unauthorized individual to assure that such forms do not fall into unauthorized hands.

219. RECORDING OF CONFORMITY INSPECTIONS.

AAO Form No. 21-40, Checklist and Inspection Record - Issuance of Initial Certificate of Airworthiness, must be used to document conformity inspections during type, production, and airworthiness certification programs.

220. AIRWORTHINESS CERTIFICATION OF MANNED FREE BALLOONS.

Manned free balloons are type-certificated as complete aircraft consisting of three major components: the envelope, the burner and fuel system, and the basket. The burner and fuel system and basket also are known as the -bottom-end components. Airworthiness certificates will not be issued for any individual component. The following are situations that may be encountered in certificating balloons in the standard category:

- a. An applicant for a standard airworthiness certificate must present a complete system (three major components) for the purpose of making a determination of airworthiness.
- b. Many balloon type certificate data sheets (TCDS) require each individual balloon envelope to be assigned an individual aircraft serial number, aircraft data plate, and aircraft registration number. As such, the balloon manufacturer obtains a registration number from the DGCA, assigns the PK-ABC to the aircraft, and reports the aircraft model and serial number to the DGCA. When an eligible envelope is mated with the necessary components to make a complete aircraft as described in the applicable TCDS, it is eligible for a standard airworthiness certificate.
- c. Manufacturers of manned free balloons may deliver a balloon envelope when the envelope is the only component Staff Instructions. A balloon envelope that is manufactured, assembled to a burner and basket, and flight tested is eligible for a standard airworthiness certificate. The envelope, along with the standard airworthiness certificate and the logbook, may be delivered without the burner and basket. The envelope may then be assembled to a different burner and basket in accordance with the TC. A person may accomplish the interchange of the burner and basket as a preventive maintenance task as described below.

221. RESERVED

SECTION 3 INITIAL OR SUBSEQUENT ISSUANCE OF AIRWORTHINESS CERTIFICATES (ORIGINAL/RECURRENT) OR RELATED APPROVALS

222. GENERAL.

This section clarifies the terms “original” and “recurrent” as related to the issuance of airworthiness certificates or approvals. Also identified in this section are the DGCA offices responsible for performing such functions, including, as appropriate, the cross-utilization of DGCA inspection personnel.

- a. A variety of airworthiness functions are performed by the DGCA. Many of these functions must be accomplished by or coordinated with manufacturing or airworthiness inspector whose have expertise in the particular specialty. These may include the principal inspector (PI) for a major aircraft manufacturer, or the principal maintenance or avionics inspector (PMI) for an air carrier with aircraft of the same type and complexity as the one for which certification is requested. A number of airworthiness functions can be accomplished by cross-utilization of the DGCA.
- b. The terms “original” and “recurrent” distinguish between those functions for which manufacturing inspector have primary responsibility and those for which airworthiness inspector have primary responsibility.
- c. The manufacturing inspector has primary responsibility for the issuance of original airworthiness certificates and approvals. The airworthiness inspector has primary responsibility for the issuance of recurrent airworthiness certificates and approvals.

223. AIRWORTHINESS CERTIFICATION

- a. Original Certification
Original certification covers the initial issuance of standard or special airworthiness certificates and approvals, including export for aircraft and aeronautical products for aircraft holding a ROI type design as follows:
 - (1) Aircraft or related products (new or used) that have not left the original product manufacturer's quality control system.
 - (2) Aircraft or related products for which a DGCA airworthiness certificate or approval has never been issued. Examples include:
 - (a) All provisional Airworthiness Certificates and amendments thereto.
 - (b) All experimental certificates and amendments thereto, including amateur-built aircraft which are new or have been subjected to a major change.
 - (c) Limited airworthiness certificates.
 - (d) Aircraft manufactured to other than ROI requirements imported to the Republic of Indonesia.
 - (3) Aircraft that previously have been issued an airworthiness certificate and presented for certification in another category or

classification, for example; aircraft converted from standard to restricted for the first time or from a special airworthiness certificate to standard for the first time.

- (4) Aircraft that have undergone changes to the type design and require flight testing, for example, under an experimental certificate for the purpose of showing compliance with regulations including, as applicable, the issuance or reissuance of a standard airworthiness certificate.
 - (5) Prototype or test articles to be used for design evaluation for TC or STC purposes. This includes parts or installation approvals.
 - (6) Aircraft with a DGCA-approved type design that have undergone a model change, as listed on the airworthiness certificate, and require a conformity inspection before issuance of an amended airworthiness certificate.
 - (7) Aircraft manufactured to a Indonesian TC (TC Validation) and exported from a country with which the ROI has a bilateral agreement, when accompanied by an Export C of A from a bilateral civil aviation authority (CAA). The CAA's Export C of A must contain a statement from that CAA stating that the aircraft conforms to the type design approved under Indonesian Type Certificate and is in a condition for safe operation.
 - (8) Issuance of special flight permits for aircraft that previously have not been issued an airworthiness certificate.
- b. Recurrent Certification. The term "recurrent certification" applies to the issuance of standard or special airworthiness certificates or approvals for the following:
- (1) Aircraft that previously have been issued an airworthiness certificate except those listed in paragraphs 223 (3) through (8) of this Staff Instruction.
 - (2) Issuance of special flight permits for aircraft which have been issued an airworthiness certificate.
 - (3) Export certification or approval of aeronautical products or articles that previously have been issued an airworthiness certificate or approval.
 - (4) Issuance of airworthiness certificates, except experimental and provisional, for aircraft with certificates that have expired, been surrendered, or been revoked.
 - (5) Changes to operating limitations.
 - (6) Issuance of experimental certificates for research and development and exhibition which have expired.
 - (7) ROI.-manufactured aircraft returning to the ROI which were previously issued an airworthiness certificate or an Export C of A in the R.I.
 - (8) Aircraft manufactured to a Indonesian TC (TC Validation) and exported from a country with which the ROI has a bilateral agreement, when accompanied by an Export C of A from a bilateral civil aviation authority (CAA). The CAA's Export C of A must contain a statement from that CAA stating that the aircraft conforms to the type design approved under Indonesian Type Certificate and is in a condition for safe operation.

224. EXCEPTIONS.

- a. Any requests, original or recurrent, for a special airworthiness certificate for LSA, amateur- built, exhibition, market survey, crew training, or air racing aircraft may be handled by DGCA Inspectors.
- b. Any requests, original or recurrent, for an experimental certificate showing compliance with the regulations is the primary responsibility of the DGCA Inspector.

225. RECORDING OF CONFORMITY INSPECTIONS.

All inspections conducted by a DGCA Inspector to determine conformity to an approved type design before an airworthiness certificate is issued must be recorded on DAAO Form No. 21-40 Checklist And Inspection Record - Issuance of Initial Certificate of Airworthiness.

CHAPTER 3 STANDARD AIRWORTHINESS CERTIFICATION

SECTION 1 GENERAL INFORMATION

300. GENERAL.

This chapter provides guidance material associated with original airworthiness certification and the issuance of standard airworthiness certificates, DAAO Form No. 21-20.

- a. CASR Part 21 sec. 21.183(a) prescribes the basic requirements for issuance of standard airworthiness certificates for aircraft manufactured under a PC.
- b. CASR Part 21 sec. 21.183(b) prescribes the basic requirements for issuance of standard airworthiness certificates for aircraft manufactured under a TC.
- c. CASR Part 21 sec. 21.183(c) prescribes the basic requirements for issuance of the standard airworthiness certificates for an import aircraft type certificated in accordance with CASR Part 21 sec. 21.21 or 21.29 and produced under the authority of another State of Manufacture. The CAA certifications must be made by issuance of an Export C of A that contains either the certification statement noted on the corresponding Indonesian TCDS or a certification statement that the aircraft meets its DGCA-approved type design and is in a condition for safe operation.
- d. CASR Part 21 sec. 21.183(d) prescribes the basic requirements for issuance of standard airworthiness certificates for used aircraft (aircraft with time in service for other than production flight testing,).
- e. CASR Part 21 sec. 21.183(h) prescribes the basic requirement for issuance of a standard airworthiness certificate for new aircraft manufactured to a TC, when the applicant does not hold the TC or a licensing agreement from the TC holder. A person seeking to manufacture a new aircraft under this provision must demonstrate to the DGCA that the manufacturing began before September 2014. Typically, these aircraft are built from spare. Paragraph 317 of this Staff Instruction provides detailed guidance for these aircraft.
- f. The DGCA has full responsibility for finding that each aircraft, at the time an airworthiness certificate is issued, conforms to the type design and is in a condition for safe operation. Therefore, sufficient DGCA inspections of each aircraft must be conducted by the certificating DGCA Inspector.

301. STANDARD AIRWORTHINESS CERTIFICATE

- a. DAAO Form No. 21-20 is used for all original and recurrent certification of aircraft in the standard category only. See chapter 8 of this Staff Instruction for instructions on completing DAAO Form No. 21-20.

- b. Standard airworthiness certificates and airworthiness certificates issued for restricted or limited category aircraft are effective for one year after the date of issue or renewal as long as the maintenance, preventive maintenance, and alterations are performed in accordance with CASR part 43 and 91.

302. APPLICATION FOR AIRWORTHINESS CERTIFICATE, DAAO FORM No. 21-21.

This form is required whenever an airworthiness certificate is issued or amended. The application for an airworthiness certificate must be made by the registered/owner/builder/operator or an agent who has a notarized letter of authorization (LOA) from the registered owner. The applicant must complete and sign the appropriate section of this form prior to submitting it to the Office. Instructions for reviewing and completing DAAO Form No. 21-21 are found in chapter 8 of this Staff Instruction. Advisory Circular 21-12, Application for Indonesia Airworthiness Certificate can also be used as reference. Sample form(s) are contained at the end of each applicable section.

303. STATEMENT OF CONFORMITY, DAAO FORM No. 21-07.

- a. This form should be submitted to the DGCA as required by CASR part 21 sec. 21.53 and 21.130 under the following circumstances:
 - (1) By applicant at the time the aircraft or parts thereof are submitted for DGCA test during the type certification program.
 - (2) By applicant for each aircraft engine or propeller submitted for type certification.
 - (3) By a TC holder or licensee manufacturing products under a TC, with initial transfer of ownership of each product or upon application for the original issue of an Airworthiness Certificate or an Export Airworthiness Certificate.

Note: For the purpose of this Staff Instruction, Type Certification Programs include any tasks associated with the issuance of a TC, STC, or approval of DAAO Form No. 43-337.

- b. The DGCA should review the form for completion and ensure that all entries are type written or printed legibly in permanent ink. The form must be signed, in permanent ink, by an authorized person who holds a responsible position in the manufacturing organization.

304. USE OF PARTS CATALOGS AND MAINTENANCE MANUALS.

- a. When an aircraft is submitted for airworthiness certification, a determination must be made that the aircraft is in conformance with its type design. This does not imply that every article must be subjected to a conformity inspection. Conformity inspections should only be conducted when, in the DGCA's judgment, conformity to the type design for a particular article cannot be substantiated by any other means.

- b. Conformity to the type design can only be established when a determination has been made that the article(s) conform to DGCA-approved design data.
- c. Parts catalogs or maintenance manuals may not be used to conduct conformity inspections. However, they should be used when applicable as an aid in establishing the configuration of a particular aircraft or in determining that the aircraft has been properly maintained.

305. BASIC ELIGIBILITY REQUIREMENTS.

Before a standard airworthiness certificate can be issued, the applicant must show the following:

- a. The aircraft conforms to its approved type design and is in a condition for safe operation.
- b. Any major alterations were accomplished in accordance with an approved STC or other DGCA-approved data.
- c. All applicable ADs have been complied with.
- d. If altered while in another category, the aircraft continues to meet, or has been returned to its approved type design configuration and is in a condition for safe operation.

306. CERTIFICATION PROCEDURE.

The following procedures are generally common to issuance of both classifications of airworthiness certificates, consistent with any other specific procedures which may be prescribed in paragraphs dealing with individual airworthiness categories. In no case may any aircraft be operated unless there is an appropriate airworthiness certificate issued to and valid for that aircraft.

- a. Record Inspection
 - (1) Obtain from the applicant a properly executed Application for Airworthiness Certificate, DAAO Form No. 21-21, and other documents as may be required for the certification action. The applicant must have the form completed and the appropriate sections signed before submitting it to the DGCA. The application must be made by the registered owner or operator or an agent who has a notarized letter of authorization from the registered owner.
 - (2) Arrange with the applicant to make the aircraft available for inspection and review the aircraft, aircraft records, and any other data necessary to establish conformity to its type design.
 - (3) Arrange with the applicant for acquiring inspection records and technical data as may be needed to establish conformity to type design.
 - (4) Using the type certificate data sheet, aircraft specification, or aircraft listing, as applicable, determines that the aircraft is eligible by make and model.
 - (5) Determine that the aircraft is properly registered in accordance with CASR Part 47.

- (6) As applicable, ensure compliance with the noise standards of sec. 21.93(b), sec. 21.183(e), CASR Part 36, Noise Standards: Aircraft Type and Airworthiness Certification, or part 91. Also ensure compliance with the fuel venting and exhaust emission requirements of CASR part 34, Fuel Venting and Exhaust Emission Requirements for Turbine Engine Powered Airplanes, and the applicable passenger emergency exit requirements of sec 21.183(f).
- (7) Review the applicant's inspection records to determine that all required inspections and tests of the aircraft have been satisfactorily completed. Such records should be complete and reflect no unapproved design changes (including Materials Review Board actions).
- (8) Determine that the aircraft has been flight tested, if required, with a Special Airworthiness Certificate. If it has not been flight tested, issue an appropriate Special Airworthiness Certificate (reference chapter 3). The flight test must be recorded in the aircraft records in accordance with CASR 91.417(a)(2)(i) as time in service. If the aircraft was assembled by a person other than the manufacturer (such as, a dealer or distributor) determine that it has been assembled and, when applicable, flight tested, in accordance with the manufacturer's DGCA approved procedures.
- (9) Establish that all of the required records and documentation have been provided for the aircraft; i.e., an up-to-date approved flight manual, a current weight and balance report, equipment list, maintenance records and manuals as required by certain airworthiness parts of the Civil Aviation Safety Regulations.
- (10) Large airplanes, turbojet, or turbo propeller multi-engine airplanes comply with the inspection program requirements of part 91, subpart E, Maintenance, Preventive Maintenance, and Alterations, or other CASR referenced therein. A supplemental structural inspection program also is required for certain large transport category airplanes.
- (11) The TC holder or STC holder has furnished one set of DGCA-accepted ICAW or one complete set of DGCA-accepted maintenance manuals to the owner of the aircraft when the first standard airworthiness certificate is issued, or has procedures in place to ensure that DGCA- accepted ICAW or maintenance manuals are provided upon delivery of the aircraft, as required by CASR Part 21 sec. 21.17(a) and (b), 21.31, and 21.50. The ICAW or maintenance manuals also are required for all products with a TC or STC. No deliveries will be allowed before the ICAW or maintenance manuals are approved.

b. Aircraft Inspection:

- (1) The nationality and registration marks and ID plate are displayed and marked in accordance with part 45. The information therein agrees with the application for airworthiness certification.
- (2) Instruments and placards are correctly located, installed, and properly marked.
- (3) All items of equipment, both required and optional, are properly listed and the equipment list.
- (4) All aircraft systems have been satisfactorily checked for proper operation. Also, determine that the operation of the engine(s)

and propeller(s) have been checked in accordance with the aircraft manufacturer's instructions.

- (5) All relevant ADs have been complied with.
- (6) Operation of the engine(s) and propeller(s) has been satisfactorily checked in accordance with the aircraft manufacturer's instructions.
- (7) The aircraft conforms to the approved type certificate data and is in a condition for safe operation.
 - (a) If the aircraft does not meet the requirements for the certification requested and the airworthiness certificate is denied, a letter should be written to the applicant stating the reason(s) for denying the certificate. A copy of the denial letter should be attached to the application and forwarded to DGCA to be made a part of the aircraft record. Therefore, when application for airworthiness is made, and the DGCA inspector has reason to suspect such letter may exist, the inspector should check with Aircraft File for the possible existence of a denial letter for a particular aircraft, as this may assist the inspector in determining aircraft eligibility.
 - (b) If it is determined that the aircraft meets the requirements for the certification requested, the DGCA inspector should:
 - (i) Make an electronic database entry (reference Chapter 8).
 - (ii) Make a recommendation to Director for issuance Standard Airworthiness Certificate, DAAO Form No. 21-20.
 - (iii) Complete Sections V and VIII of DAAO Form No. 21-21, as appropriate, in accordance with the instructions contained in Chapter 8.
 - (iv) Examine, review and route the certification file per Chapter 8.

307-308. RESERVED.

SECTION 2 NEW AIRCRAFT

309. GENERAL.

This section provides policy and guidance material associated with airworthiness certification for new aircraft being produced under the terms of a Type Certificate (TC), and Production Certificate (PC).

310. RESERVED

311. CERTIFICATION PROCEDURES.

The DGCA inspector should follow the appropriate certification procedures in section 1 of this chapter.

312. AIRCRAFT MANUFACTURED WITHOUT DGCA PRODUCTION APPROVAL (PRODUCTION UNDER TC).

- a. The DGCA has full responsibility for ensuring that each aircraft for which an airworthiness certificate is issued conforms to the type design and is in a condition for safe operation. Sufficient inspections of each aircraft must be conducted by DGCA Inspector.
- b. Under the provisions of CASR part 21 sec. 21.183(b), Standard Airworthiness Certificates may be issued for aircraft produced under a type certificate, to a manufacturer who does not have DGCA production approval, for a period of six months after the type certificate has been issued. An extension of the six months period may be authorized by the Director General to the manufacturer.(Reference CASR part 21 sec.21.123(h)).
 - (1) Before any deviation from the six-month requirement of CASR part 21 sec.21.123(h) is authorized, it should be positively determined that the DGCA responsibility will be met. All inspections conducted or witnessed by the DGCA inspector should be documented on Conformity Inspection Record, DAAO Form No. 21-06, and all nonconformities should be corrected and such correction(s) documented before issuance of an airworthiness certificate.
 - (2) The DGCA should establish, and retain indefinitely, a DGCA inspection record file for each aircraft manufactured without a DGCA-production approval, to substantiate the basis for issuance of the airworthiness certificate for each such aircraft. Non-conformities, involving materials review action, should be resolved through the DGCA engineering.
 - (3) In accordance with CASR part 21 sec. 21.183(b), the applicant for an airworthiness certificate must submit a Statement of Conformity, DAAO Form No. 21-7, with each Application for an Airworthiness Certificate.

313. AIRCRAFT MANUFACTURED UNDER A PRODUCTION CERTIFICATE (PC).

- a. When aircraft are manufactured under the terms of a Production Certificate, DGCA inspections may be reduced to a minimum. This is possible because the manufacturer has previously demonstrated to the satisfaction of the DGCA, that he has the facilities, equipment, personnel, systems, and procedures which will ensure continuous conformity with the approved type design.
- b. Aircraft that are manufactured under the terms of a Production Certificate are eligible for the issuance of an airworthiness certificate without further showing (CASR part 21 sec.21.183(a)).Accordingly, the submission of a Statement of Conformity, DAAO Form No. 21-7, by the manufacturer is not required nor is it necessary for the DGCA to inspect each aircraft to determine conformity with the approved type design. The inspection frequency of these aircraft is contained in the appropriate program guidelines.

314. RESERVED

315. AIRWORTHINESS CERTIFICATION OF VERY LIGHT AIRCRAFT (VLA).

- a. A VLA is considered a special class of aircraft under CASR part 21 sec 21.17(b). A VLA is defined as an airplane with a single engine (spark or compression-ignition), not more than two seats, a maximum certified takeoff weight of not more than 750 kilograms (approximately 1654 pounds), and a stall speed of not more than 45 knots calibrated airspeed in the landing configuration. The operation of these airplanes is limited to normal category maneuvers and to Visual Flight Rules (VFR), day only, under CASR part 91.
- b. All VLA are eligible to receive DAAO Form No. 21-20 under CASR part 21 sec 21.183(a) or (b) if the airplane has a TC and is manufactured under a DGCA TC or PC. Because the VLA is type certificated as a special class of aircraft under CASR part 21 sec 21.17(b), the category in block No. 4 on DAAO Form No. 21-20 must be identified as VLA-Special Class.
- c. The import airworthiness certification requirements of CASR part 21 sec 21.183(c) are applicable to VLA designed to meet the criteria of the European Aviation Safety Agency (EASA) CS-VLA (formerly Joint Aviation Requirements (JAR) for VLA). The DGCA type certification basis for import VLA with EASA CS-22 (formerly JAR 22) engines and propellers installed will be shown on the TCDS. The category in block No. 4 on DAAO Form No. 21-20 will be identified as VLA-Special Class for Imported VLA.

316. AIRCRAFT MANUFACTURED IN A BILATERAL COUNTRY.

- a. New aircraft manufactured in a bilateral country will be inspected and certificated, except that under a bilateral agreement, the CAA of the State of Manufacture must certify that the aircraft has been examined, tested, and found to meet its Indonesian type design (see paragraph 511 of this Staff Instruction for a definition of a “new”

product). A DGCA Inspector must inspect the aircraft to determine airworthiness eligibility using the current TCDS before the CASR part 21 sec 21.183(c) airworthiness certificate is issued for the completed aircraft.

- b. The extent of each inspection conducted depends on many factors requiring good judgment. All articles and completed aircraft should be given a thorough inspection upon delivery of the aircraft to the owner/operator.
- c. The certifying statement from the CAA of the State of Manufacture must be submitted by the applicant with each application for the first Indonesia airworthiness certificate to be issued for a particular aircraft. See paragraph 222 b (8) of this Staff Instruction and CASR part 21 sec. 21.183(c) and 21.185(c).

317. NEW AIRCRAFT MANUFACTURED UNDER THE PROVISIONS OF CASR PART 21 SEC. 21.6(b).

- a. General. The following provides guidance and instructions on issuing a standard airworthiness certificate, under the provision of CASR part 21 sec. 21.183(h), for new aircraft manufactured to a TC issued under CASR part 21 sec. 21.21. This requirement only applies to an applicant that does not hold the TC or a licensing agreement from the TC holder. Additionally, under the provision of CASR part 21 sec. 21.6(b), an applicant may build and certificate only one new aircraft (one aircraft, one person, one time), and the applicant must have started manufacturing that aircraft before December 2014.

Note: This guidance and instructions do not apply to an applicant that holds the TC or a licensing agreement from the TC holder to build an aircraft. These aircraft may be certificated only under the provisions of CASR part 21 sec. 21.183(a) or (b).

- (1) A person seeking to manufacture a new aircraft under the provisions of CASR part 21 sec. 21.6(b) and 21.183(h) must demonstrate to the DGCA that the manufacturing began before December 2014. Documents that could prove manufacturing began before December 2014, include items such as receipts for the purchase of articles, dated photographs, and dated information received from the DGCA related to the manufacturing or certification process for the specific aircraft. This information must be provided to the DGCA no later than the time of application for an original airworthiness certificate.
 - (2) If an applicant meets the requirement of paragraphs 317a and 317a(1) of this Staff Instruction, proceed the application. The directorates will maintain a record of all projects approved under this paragraph.
- b. Applicant Responsibilities. An applicant must show that the products and articles meet the airworthiness and environmental standards that are the basis for their individual approvals. In addition, the collectively assembled aircraft will satisfy the certification basis identified on the referenced type certificate and meet the applicable requirements of CASR part 21 sec. 21.183(h) and

any special conditions prescribed by the DGCA. The applicant begins by submitting a design package to the DAAO (SDE).

- (1) The applicant will deliver a compatibility document/matrix to show what STCs are proposed for installation on each aircraft. The matrix should show that the applicant has reviewed the STCs and determined that there are no compatibility issues. The DAAO (SDE) review is an evaluation as to how the applicant made the determination of compatibility. The compatibility document will be submitted to and accepted by the DAAO (SDE) before certifying the aircraft.
- (2) The applicant will submit a complete design package for the aircraft. The type design data must meet the requirements in CASR part 21 sec. 21.183(h) (as defined in Staff Instruction 21-01, Type Certification) and be complete enough to allow the DGCA to verify that any parts manufacturer approval (PMA) parts or technical standard order (TSO) articles meet the TC requirements. Only DGCA -approved design data will be submitted. Field repair manuals or illustrated article breakdowns will not be submitted; they are DGCA -accepted data, not DGCA - approved data. In addition, the requirements of CASR part 21 sec.21.5, 21.50, and 21.99 needs to be complied with as applicable. The following are items that should be included in the design package. However, the DAAO (SDE) may request additional documentation as needed.
 - (a) A master drawing list, which will consist of a complete description of each aircraft type design configuration, including all STCs and a list of the PMA parts, TSO articles and owner/operator-produced articles, which make up the configuration of each aircraft. The master drawing list will be the basis for determining conformity to a TC for each aircraft.

Note: This list should include installation instructions, process specifications, the drawings or document number, revision level, engineering change orders in effect, the date prepared, and the approval dates of all material.

- (b) The aircraft assembly plan, so that the DGCA Inspector is able to determine when different assembly processes will take place.
 - (c) The proposed weight and balance process.
 - (d) The proposed flight test procedure. The applicant must flight test the aircraft in accordance with a DGCA-approved production flight test procedure and flight check-off format as prescribed by CASR part 21 sec.21.127. A DGCA flight test engineer will approve the flight test procedure.
 - (e) The DAAO (SDE) will verify the design package is complete, perform a review and validation of the design data to ensure the data are approved and current. Staff Instruction 21-01 contains more detailed requirements of a design package.
- (3) The applicant will maintain and make available to the DGCA, when requested, all supporting documents such as manufacturers' invoices, suppliers' affidavits, packing lists, articles lists, material certification sheets, and other acceptable

records to provide traceability of raw stock and articles to their origin and to provide a basis of approval.

- (4) The applicant will submit to the DGCA a complete conformity folder for the aircraft and DAAO Form No. 21-07 certifying that the completed aircraft conforms to the DGCA-approved data for this project at the time an application for an airworthiness certificate is submitted. In addition to the design package and STC compatibility documents, the conformity folder will include all STCs, inspection checklists, flight test records, and documentation for the specific aircraft being certificated. The build/inspection checklists will include the initials/stamp of the individuals who performed the work and/or inspections and, upon completion, the typed and/or printed name and signature of the applicant.
- c. DGCA Responsibilities. The Manufacturing Inspector needs to explain to the applicant that because the applicant is not required to have a quality system the same as a PAH, it is the applicant's responsibility to demonstrate to the DGCA that the aircraft conforms to the TC and is in a condition for safe operation. Also, when presenting anything to the DGCA, the applicant must ensure compliance with all airworthiness requirements in place at the time of presentation. In addition to the requirements of section 1 of this chapter, the DGCA will use the following guidance to establish that the aircraft conforms to its type design as approved by the DGCA:
- (1) The Manufacturing Inspector must verify the aircraft is assembled from approved articles that conform to the DGCA-approved type design for that particular model. The Manufacturing Inspector must review the appropriate documents as presented by the applicant, substantiating DGCA production approval status of these articles.
 - (2) The Manufacturing Inspector must verify that any major changes to the approved design package have been approved by the appropriate SDE.
 - (3) Used articles with established service life-limited parts must be proven airworthy and accompanied by appropriate historical records to substantiate time in service. Such evidence, together with other maintenance records, should be returned to the applicant and made a part of the aircraft historical records. Life-limited articles without historical records substantiating their eligibility cannot be accepted for certification on aircraft.
 - (4) The serial number of the aircraft does not have to appear on the aircraft specification, TCDS, or aircraft listing to be eligible for a standard airworthiness certificate. The aircraft serial number is used primarily for the purpose of individual identification of an aircraft.
 - (5) The Manufacturing Inspector must ensure the applicant provides parts catalogs, assembly and/or maintenance manuals (as may be produced by the original equipment manufacturer), or the equivalent, for use as a guide by the DGCA during all phases of the aircraft assembly inspections.
 - (6) After the product SDE reviews the design package and finds it to be acceptable, the Manufacturing Inspector uses the package and any other relevant information to develop a conformity inspection plan. The Manufacturing Inspector reviews the plan to determine the following:

- (a) What processes, if any, are to be considered critical and require Manufacturing Inspector mandatory inspection acceptance points.
 - (b) Where mandatory DGCA conformity inspection points will be placed. At this point, the assembly plan can be used to forecast when these inspections will be accomplished. These inspections will not be bypassed by the applicant and may require a work stoppage if anything requiring inspection could be covered by further assembly.
 - (c) That the applicant's incoming articles and raw stock meet all TC requirements and are free of shipping and handling damage. Supporting documents such as manufacturer invoices, supplier affidavits, packing lists, parts lists, material certification sheets, and other acceptable records will be maintained and made available to the DGCA.
 - (d) That the applicant has a process in place to ensure any special tooling meets all needed calibration requirements (for example, torque wrenches, assembly jigs, any equipment used to calibrate flight instrumentation). This process must be traceable to the National Institute of Standards and Technology.
 - (e) That all articles are in compliance with approved design data. The following guidance will establish compliance:
 - (i) DGCA DGCA-approved articles obtained from a PAH and eligible for installation on this make and model will be free of shipping and handling damage and meet applicable type design data.
 - (ii) New articles fabricated will be properly manufactured, meet all applicable type design data requirements, and meet the airworthiness requirements of the DGCA regulations applicable to the product on which the article is to be installed.
 - (iii) Used articles meet all applicable requirements of CASR part 43. These parts will possess an airworthiness approval tag (DAAO Form No. 21-18) documenting that they are airworthy and approved for return to service.
 - (iv) The applicant will make available all purchase orders and documentation to provide traceability of articles to their origin and to provide the basis of approval for the article. These documents will be available at the time of certification and used to verify the accuracy of the article information contained in the master drawing list. The Manufacturing Inspector will review the article traceability (origin) information at the time of certification.
 - (f) That the aircraft identification and registration marking is correct and has been properly processed.
 - (g) That there is a process to ensure the reporting of failures, malfunctions, and defects for continued airworthiness will be accomplished.
- (7) The Manufacturing Inspector will perform all conformity inspections.
 - (8) The Manufacturing Inspector will witness the applicant weigh the aircraft to determine empty weight and center of gravity

- (CG). A weight and balance report will be submitted at the time of airworthiness certification.
- (9) The Manufacturing Inspector will review the completed DGCA-approved flight check-off form to verify flight test completion. The aircraft must be flight tested by the applicant in accordance with an DGCA-approved production flight test procedure and flight check-off format as prescribed by CASR Part 21 sec. 21.127.
 - (10) The Manufacturing Inspector will review the DAAO Form 21-07, certifying the completed aircraft conforms to the applicable DGCA-approved data for this project. Any major deviations to the TC must be described on the statement of conformity and approved by DGCA engineering. When submitting DAAO Form No. 21-07 for an aircraft built from spare and/or surplus parts, cross out the phrase in section IV, item B, —produced under type certificate□ and enter below that item the TC, specification, or listing numbers as applicable.
 - (11) A new ID plate will be reviewed by the DGCA before installation on the aircraft to verify it meets the requirements of CASR Part 45 sec. 45.11 and 45.13. The builder's name would be that of the person who assembled the aircraft and not the name of the TC owner/manufacturer who builds the same model of aircraft. The model designation is that of the aircraft type design to which conformity is determined. The serial number selected by the builder should be clearly distinguishable from the TC holder's serial numbers; for example, the serial number could be the builder's name or initials together with a number.
 - (12) The DGCA should list supporting documents such as manufacturer invoices, supplier affidavits, packing lists, parts lists, material certification sheets, and other acceptable records submitted by the applicant on DAAO Form No. 21-06, which becomes part of the checklist and inspection record. The basis for determining conformity with the DGCA-approved data for this project will be established and become a matter of record for future reference.

318. RESERVED

SECTION 3 USED AIRCRAFT

319. GENERAL.

- a. The provisions of CASR Part 21, Section 21.183(d) are applicable to used aircraft. Its provisions are applied to airworthiness certification of used aircraft (aircraft with time in service for other than production flight testing), including aircraft type certificated under CASR Part 21 sec.21.29 but not eligible for certification under sec. 21.183(c), ROI.-manufactured civil aircraft that were exported and later returned to the Republic Indonesia for DGCA certification. In addition to the provisions contained in section 1 of this chapter, this section provides further guidance material and procedures associated with airworthiness certification of these aircraft.
- b. Obtaining an airworthiness certificate may not, by itself, be sufficient to meet all of the regulatory requirements for operating an aircraft in the Republic Indonesia. Operations under part 121 or part 135 may require additional inspections, tests, or the installation of additional instruments and/or equipment before operation.

320. CERTIFICATION PROCEDURES.

The DGCA inspector should follow the appropriate certification procedure in Paragraph 306 along with the guidance and procedures in paragraphs 322 through 323 of this SI when examining a used aircraft.

321. CONFORMITY DETERMINATION - USED AIRCRAFT

- a. Under CASR Part 21 sec. 21.183(d), an applicant is entitled to a standard airworthiness certificate for used aircraft (aircraft with time in service for other than production flight testing) (to include sec. 21.29 aircraft). The applicant must present acceptable evidence to substantiate conformance to the DGCA-approved type design, including any modifications, for example, an STC or Form 337, and that the aircraft has been inspected in accordance with the performance rules for 100-hour inspections as set forth in CASR Part 43 sec.43.15 and found to be airworthy by one of the following persons:
 - (1) The manufacturer;
 - (2) The holder of an appropriately rated repair station certificate issued under CASR part 145, Repair Stations;
 - (3) The holder of a mechanic certificate issued under CASR Part 65, Licensing of Aircraft Maintenance Engineer; or
 - (4) The holder of a certificate issued under CASR Part 121 or 135 and having a maintenance and inspection organization appropriately rated for the type of aircraft involved.
- b. Under the provisions of CASR Part 21 sec. 21.183(d), it is the applicant's responsibility to present, with the application, evidence that substantiates conformity with the DGCA-approved type design.

The applicant must provide any inspection and maintenance records, service history, and any other records substantiating eligibility of the parts being used. The DGCA is required to make a finding of conformity in accordance with sec. 21.183(d)(3), which consists of a review of the applicant's evidence showing how conformity was determined. Sufficient conformity inspections must be conducted on the aircraft and the applicant's evidence for the DGCA inspector to find the aircraft to be in conformity. If conformity cannot be determined, the inspection should be stopped until such time as the applicant presents new evidence showing such determination has been made.

- c. Compliance with the inspection requirement can be demonstrated by one of the following methods:
 - (1) The applicant may have the aircraft inspected in accordance with the performance rules for 100-hour inspections set forth in CASR Part 43 sec. 43.15(c)(1).
 - (2) The DGCA may accept a recent 100-hour inspection, whether performed in the ROI or in any other country where the aircraft previously was located while the aircraft was on the ROI registry when the inspection was accomplished by an approved maintenance organization appropriately certificated by the CAA of a country with has been approved by DGCA
- d. The process by which an applicant can meet these requirements depends on the aircraft involved and its history. This Staff Instruction is intended to address the most common situations encountered in certificating aircraft under CASR part 21 sec. 21.183(d).

322. FLIGHT TESTING.

The DGCA may require flight tests to determine that the aircraft is in a condition for safe operation. The applicant must consult with the DGCA to establish a flight test procedure and flight checkoff form. The DGCA must confirm that the aircraft has been flight tested by the applicant's pilot in accordance with that procedure. Flight tests may not be conducted by the DGCA until an entry has been placed in the aircraft records to show that these tests have been satisfactorily completed by the applicant. The appropriate airworthiness certificate for this purpose is a special airworthiness certificate, for showing compliance with CASR.

323. ISSUANCE OF STANDARD AIRWORTHINESS CERTIFICATES UNDER CASR PART 21 SEC. 21.183(d) - USED AIRCRAFT.

Before a standard airworthiness certificate is issued, the applicant must show that the aircraft meets the DGCA-approved type design for that aircraft. This includes aircraft type certificated under part 21 sec. 21.29.

- a. Upon initial contact by persons desiring a standard airworthiness certificate for a ROI. type-certificated aircraft located in a country other than the ROI. the DGCA must determine whether the certification program can be accomplished in the desired location without placing an undue burden on DGCA resources.

- b. In addition to meeting the certification requirements of section 1 of this chapter, the applicant must do the following:
- (1) For ROI.-Manufactured, ROI Type-Certificated Aircraft:
 - a. Provide the original or an acceptable copy of the ROI. Export C of A obtained when the aircraft originally was exported from the Republic of Indonesia. This provides a baseline for the inspection to determine whether the aircraft meets its ROI TC and is used to determine whether there were any deviations to the type design as annotated on the Export C of A when the aircraft originally was exported. For example, equipment inconsistent with the CASR may have been incorporated to comply with the importing country's additional design requirements. All deviations must be resolved before a standard airworthiness certificate can be issued.
 - b. Show that any aircraft article repaired while the aircraft was operating under non- ROI registry was accomplished in accordance with methods acceptable to the DGCA and that the article conforms to its type design. When this cannot be shown, the article must be removed.
 - c. Show that any major alterations, modifications, or repairs performed while the aircraft was under non-ROI. registry was accomplished in compliance with DGCA-approved data and that the aircraft conforms to its type design requirements. Persons authorized under CASR part 43 sec. 43.7 must record in the maintenance records that the major alterations, modifications, or repairs conform to DGCA-approved data.
 - d. Obtain DGCA approval for or resolve any deviation from the type design.
 - e. Show that any maintenance performed while the aircraft was under non-ROI. registry was performed in accordance with methods acceptable to the DGCA and that the aircraft conforms to its approved type design or properly altered condition.
 - f. The applicant for an airworthiness certificate whose aircraft has been maintained, modified, or repaired while under foreign registry must ensure that all records required by CASR part 91 sec. 91.417(b) are translated into the English language.

CHAPTER 4 SPECIAL CLASSIFICATION - AIRWORTHINESS CERTIFICATION

SECTION 1. GENERAL INFORMATION

4000. GENERAL.

The procedures in this chapter provide guidance material associated with original airworthiness certification and the issuance of Special Airworthiness Certificates, DAAO Form No. 21-24. CASR Part 21, Subparts H and I, prescribes the procedural requirements for airworthiness certification for light-sport, restricted, limited, provisional, multiple and experimental categories and for issuance of special flight permits.

4001. APPLICATION FOR AIRWORTHINESS CERTIFICATE, DAAO FORM NO. 21-21.

This form is normally required whenever an airworthiness certificate is issued or amended. This includes changes to operating limitations which may have been prescribed. The applicant should complete the appropriate sections and sign the application. The application should be submitted to DGCA, with any other document(s) for the requested certification. For Experimental Certification the applicant must submit with a program letter to ensure all of the requirements of CASR part 21 sec. 21.193(d) have been met.

4002. CERTIFICATION PROCEDURES.

The following procedures are generally common to issuance of both classifications of airworthiness certificates, consistent with any other specific procedures which may be prescribed in paragraphs dealing with individual airworthiness categories. In no case may any aircraft be operated unless there is an appropriate airworthiness certificate issued to and valid for that aircraft. The DGCA must conduct any inspections necessary to verify the certification procedures listed below, including any other inspections

a. Record Inspection

- (1) Obtain from the applicant a properly executed Application for Airworthiness Certificate, DAAO Form No. 21-21, and other documents as required for the certification action.
- (2) For experimental certification, obtain from the applicant a program letter that identifies the aircraft, the purpose of the certificate, the area over which the operations are to be conducted, the duration of the program, etc.
- (3) Arrange for acquiring inspection records and technical data as may be needed to establish conformity to the type design.
- (4) Using the type certificate data sheet, aircraft specification, or aircraft listing, as applicable, determine that the aircraft is eligible by make and model.

- (5) Determine that the aircraft is properly registered in accordance with CASR Part 47
 - (6) Determine that the aircraft has been flight tested, if required. If it has not been flight tested, issue an appropriate Special Airworthiness Certificate. The flight test must be recorded in the aircraft records in accordance with CASR Part 91 sec. 91.417(2)(i), as "time in service" (reference CASR Part 1). If the aircraft was assembled by a person other than the manufacturer (such as, a dealer or distributor) determine that it has been assembled and, when applicable, flight tested, in accordance with the manufacturer's DGCA-approved procedures.
 - (7) Establish that all of the required records and documentation have been provided for the aircraft; i.e., an up-to-date approved flight manual, a current weight and balance report, equipment list, maintenance records and manuals as required by certain airworthiness parts of the CASRs.
 - (8) Review the applicant's weight and balance data for accuracy and currency for the aircraft submitted.
 - (9) Determine that all relevant ADs have been complied with.
- b. Aircraft Inspection. The DGCA must arrange with the applicant to make the aircraft available for inspection to determine the following:
- (1) The aircraft is eligible by make and model using the TCDS, aircraft specification, or aircraft listing, as applicable.
 - (2) The ID plate meets the requirements of CASR part 45 sec. 45.11, as applicable.
 - (3) The information on the ID plate is correct, matches the information on Form 21-21, and is in accordance with CASR part 45 sec. 45.13, as applicable.
 - (4) The aircraft nationality and registration marks are displayed in accordance with CASR part 45.
 - (5) The flight control system operates properly.
 - (6) The engine(s), propeller(s), and associated instruments operate in accordance with the manufacturer's instructions.
 - (7) The pitot static system and associated instruments operate properly.
 - (8) All items of equipment, both required and optional, are properly listed and the equipment list and the aircraft agree.
 - (9) The instruments are marked in accordance with the approved flight manual or any other data used for aircraft involved in a type certification program.
 - (10) All modifications have been inspected and recorded, and are in a condition for safe operation.
 - (11) An emergency locator transmitter (ELT) is installed, as required in accordance with CASR part 91 sec. 91.207.
- c. Certificate Issuance.
- (1) If the aircraft does not meet the requirements for the certification requested and the airworthiness certificate is denied, a letter should be written to the applicant stating the reason(s) for denying the airworthiness certificate. A copy of the denial letter should be attached to the application and filed to be made part of the aircraft record. The DGCA inspector should check with Aircraft record for possible existence of a denial

letter, for a particular aircraft, when it is suspected that such may exist as this may assist the inspector in determining aircraft eligibility.

- (2) If the aircraft meets the requirements for the certification requested, the DGCA should:
 - (a) Prepare and issue Special Airworthiness Certificate, DAAO Form No. 21-24.
 - (b) Make an aircraft Electronic database entry.
 - (c) Complete Sections V and VIII of DAAO Form No. 21-21, as appropriate, in accordance with the instructions contained in Chapter 8 of this SI.
 - (d) Review and Filling per Chapter 8 of this SI.

4003. SPECIAL AIRWORTHINESS CERTIFICATES.

- a. DAAO Form 21-24 used for all aircraft that are certificated in categories other than STANDARD.
- b. An experimental certificate for R&D, showing compliance with regulations, crew training, or market surveys is effective for 1 year or less after the date of issuance.
- c. The duration of amateur-built, exhibition, air racing, light-sport category, and LSA experimental certificates will be unlimited unless the DGCA finds good cause that a specific period should be established.
- d. However, experimental certificates issued for the purpose of flight testing of amateur-built, exhibition, air racing, and light-sport are effective for a period of time necessary to complete the flight testing required by CASR part 91 sec. 91.319(b). If the testing is not completed within the terms of the certificate, the aircraft must be submitted for reinspection to the DGCA and a new certificate issued.
- e. Operating limitations generally applicable to nonstandard aircraft are printed on the reverse side of DAAO Form No. 21-24. The DGCA also may prescribe additional operating limitations deemed necessary for the special purpose involved. The additional limitations will be enumerated on a separate sheet, dated, signed, and attached to DAAO Form No. 21-24. See the applicable sections of this chapter for information regarding additional operating limitations.

4004. RESERVED

SECTION 2. RESTRICTED AIRWORTHINESS CERTIFICATION

4005. GENERAL.

The procedures in this section provide guidance for the issuance of Special Airworthiness Certificates for aircraft type certificated in the restricted category in accordance with CASR part 21 sec. 21.25 and sec. 21.29.

- a. An aircraft type certificated in the restricted category for agricultural operations may continue to be operated under the provisions of the original certification. The certification basis for all aircraft (except as otherwise specified in subparagraph b) to be type certificated in the restricted category is determined in accordance with CASR part 21 sec.21.25.
- b. Foreign-manufactured aircraft which are type certificated in the restricted category, under CASR part 21 sec. 21.29, are eligible for a Special Airworthiness Certificate-Restricted under CASR part 21 sec. 21.185(c).
- c. Foreign-manufactured aircraft type certificated in any other category, under CASR 21.29, are not eligible for certification in the restricted category unless the aircraft was issued a Standard Airworthiness Certificate under CASR 21.183(c) and subsequently was modified in accordance with section 3 of this chapter. In this instance, CASR part 21 sec. 21.185(b) would be the basis for issuing the restricted airworthiness certificate. By virtue of being previously certificated in the R.I, the aircraft is no longer considered to be an import aircraft.
- d. An aircraft must be type-certificated under CASR Part 21 sec. 21.25 before a restricted category airworthiness certificate can be issued. In the case of an aircraft previously type- certificated in another category (for example, standard category) and modified for a restricted special purpose operation under CASR Part 21 sec. 21.25, the previously approved TC and the STC or approved data can be considered as the equivalent of a restricted TC. The TC and STC or approved design data should define the design parameters that make up the restricted category TCDS.

4006. CERTIFICATION PROCEDURES.

The DGCA should follow the appropriate certification procedures outlined in paragraph 4002 of this chapter.

4007. ELIGIBILITY.

- a. Aircraft which are eligible for a Special Airworthiness Certificate in the restricted category are as follows:

- (1) Aircraft type certificated in the restricted category and manufactured under a type certificate, or a production certificate.
 - (2) Aircraft which are imported into the R.I. and type certificated in the restricted category in accordance with CASR part 21 sec.21.29, and which have been certified by the country of manufacture to conform to the approved type design; and
 - (3) Type certificated aircraft which are eligible for a Standard Airworthiness Certificate that have been modified and approved for a restricted purpose under CASR part 21 sec. 21.25, including aircraft type certificated for agricultural operations.
- b. Aircraft may be considered eligible for a Special Airworthiness Certificate-Restricted when found to comply with the noise requirements of CASR part 36, in accordance with CASR part 21 sec. 21.185(d).

4008. SPECIAL PURPOSE OPERATIONS.

As authorized under the provisions of CASR part 21sec.21.25, special purpose operations for restricted category aircraft include:

- a. Agricultural (spraying, dusting, seeding, and livestock and predatory animal control);
- b. Forest and wildlife conservation;
- c. Aerial surveying (photography, mapping, and oil and mineral exploration);
- d. Patrolling (pipe lines, power lines, and canals);
- e. Weather control (cloud seeding);
- f. Aerial advertising (skywriting, banner towing, airborne signs, and public address systems);
- g. Any other operation specified by the Director General.(When an applicant wishes to obtain approval for a new special purpose operation previously not approved under CASR Part 21 sec. 21.25(b)(7), application with supporting justification should be made by letter to the DGCA. If accepted, DGCA will provide the new proposed special purpose operation in the CASR).

4009. STATEMENT OF CONFORMITY, DAAO FORM NO. 21-07.

The holder or licensee of a type certificate, for a restricted category aircraft manufactured in the ROI must, on the initial transfer of the ownership or application for an original airworthiness certificate for such product manufactured under that type certificate, give the DAAO Form No. 21-07 (CASR part 21 sec. 21.130 and 21.183(b)).

4010. OPERATING LIMITATIONS.

All aircraft type certificated in the restricted category must be operated in compliance with the operating limitations prescribed in CASR part 91 section 91.313. In addition, for turbine-powered aircraft, piston-powered aircraft with over 800 horsepower, rotorcraft, large aircraft (over 12,500 lbs.), and any other aircraft as deemed necessary, the limitation concerning pilot qualifications, as identified in paragraph 139 b(9), should be prescribed. The DGCA may also prescribe additional operating limitations as deemed necessary for the special purpose involved. The additional limitations will be enumerated on a separate sheet, dated, signed, and attached to the Special Airworthiness Certificate, DAAO Form No. 21-24.

4011. AGRICULTURAL AIRCRAFT.

The following provides guidance concerning the means of approval for increases in the maximum certificated weight for aircraft certificated in the restricted category for agricultural operations. CASR part 21 sec. 21.101 sets forth the provisions that determine the regulations applicable to a change in a TC. Such changes would include an increase in the maximum certificated takeoff weight for an aircraft, which is defined in CASR part 43 as a major alteration:

- a. If parts CASR part 21 and 23 are the original certification basis shown on the TCDS for a restricted category TC, then compliance with the applicable CASR must be shown to substantiate and approve a change to the TC.
- b. Whether or not a data sheet exists, CASR part 21 sec.21.101(b) requires compliance with the regulations in effect on the date of application for the change (CASR part 23) that the DGCA finds necessary for safety.

4012. AIRWORTHINESS CERTIFICATE.

When an application is made for a restricted category airworthiness certificate requesting one of the special purposes listed in CASR Part 21 sec. 21.25(b)(1) through (6) that is listed in the TCDS certification basis or is approved by an installed STC, the purpose will be entered in block A of DAAO Form No. 21-24. Carriage of cargo for compensation or hire is prohibited by CASR Part 91 sec. 91.313 for any restricted category operation, including any special purpose of CASR Part 21 sec. 21.25(b)(1) through (b)(7). However, CASR Part 11 sec. 91.313 does not apply to non-passenger carrying civil rotorcraft external load operations conducted under CASR part 133, Rotorcraft External-Load Operations. If the requested purpose is to include the carriage of cargo that is incidental to the owner/operator's business, DAAO Form No. 21-24 must have the following words entered in block 2 (Purpose): "CASR Part 21 sec. 21.25(b)(7) (other), SEE ATTACHED LIMITATIONS". For all purposes listed in CASR Part 21 sec. 21.25(b)(1) through (7), the following words must be entered in block 4 (Flight) (after crossing out the words "From"

and “To”): “SEE ATTACHED OPERATING LIMITATIONS”, and “SEE ITEM D, REVERSE SIDE OF THIS CERTIFICATE”.

Note: In no case will “Carriage of Cargo” (or similar language) be entered as a purpose in block 1 on DAAO Form No. 21-24.

- a. When the carriage of cargo is incidental to the aircraft owner/operator’s business, the prescribed limitations will then identify the authorized cargo that may be carried.
- b. The additional limitations attached to the airworthiness certificate will specify the aircraft model, Nationality and Registration Mark, and serial number. All restricted category airworthiness certificates issued for aircraft whose special purpose operation includes the carriage of cargo will include the following limitations:
 - (1) This aircraft is prohibited from carrying cargo for compensation or hire. Carriage of cargo is limited to such cargo that is incidental to the aircraft owner/operator’s business which is other than air transportation. The authorized cargo that may be carried on this aircraft is _____'
(Applicability: All)
 - (2) This rotorcraft is prohibited from carrying cargo for compensation or hire unless it is engaged in an CASR Part 133 external load operation.
(Applicability: Rotorcraft conducting CASR Part 133 external load operations)
 - (3) This aircraft may not be operated over any foreign country without the special permission of that country. Evidence of that permission must be carried aboard the aircraft, along with the ROI, airworthiness certificate, and made available to the DGCA or CAA in the country of operation upon request.
(Applicability: All)
 - (4) This aircraft has not been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation.
(Applicability: All)
- c. Additional operating limitations as prescribed in CASR Part 91 sec. 91.313 will be assigned for all special purposes of restricted category aircraft operations and are part of DAAO Form No. 21-24.
- d. The DGCA will ensure that the owner/operator is briefed and clearly understands that the restricted aircraft is prohibited by CASR Part 91 sec. 91.313(c) from the carriage of cargo for compensation or hire. A record of this briefing should remain with the certification file.

4013. DISPLAY OF MARKS (RESTRICTED).

The DGCA shall determine that the aircraft displays nationality and registration marks according to CASR part 45 section 45.21 and that the word "RESTRICTED" is displayed according to section 45.23.

4014-4015. RESERVED.

SECTION 3 MULTIPLE AIRWORTHINESS CERTIFICATION

4016. GENERAL.

Under the provisions of CASR part 21 sec.21.187, applicants for an airworthiness certificate in the restricted category, and in one or more other categories, are entitled to the certificates if they show compliance with the requirements for each category when the aircraft is in the configuration for that category. In addition, the applicant must show that the aircraft can be converted from one category to another by removing or adding equipment by simple mechanical means.

4017. CERTIFICATION PROCEDURES.

The DGCA Inspector should follow the applicable certification procedure in paragraph 4002 of this SI.

4018. ELIGIBILITY.

- a. An aircraft in the normal, utility, acrobatic, transport or limited category may be eligible for multiple airworthiness certifications if it can be converted to the restricted category in accordance with CASR part 21 sec. 21.25 and 21.187. AN AIRCRAFT HAVING A SPECIAL AIRWORTHINESS CERTIFICATE - EXPERIMENTAL IS NOT ELIGIBLE FOR MULTIPLE AIRWORTHINESS CERTIFICATIONS. An aircraft type-certificated in both the normal and commuter categories is eligible for an airworthiness certificate in only one category at a time.
- b. The procedures for multiple airworthiness certification is a combination of the procedures covering standard and restricted categories, or limited and restricted categories, plus the followings:
 - (1) The DGCA must witness the applicant's method for compliance with CASR part 21 sec. 21.187(a)(1) and 21.187(a)(2), and make a determination that the detailed conversion instructions covering the change over from one category to the other are adequate. The operating limitations should contain a statement that each conversion from one category to the other must be in accordance with such instructions.
 - (2) If one of the airworthiness categories is in the standard configuration, and the aircraft will be used for carriage of passengers for compensation or hire in the standard configuration, the DGCA must evaluate the restricted special purpose operation to determine whether the airworthiness inspection prescribed in CASR part 21 sec. 21.187(b) will be required each time the aircraft is converted from the restricted category to the standard category. Normally, if the special purpose operation involves carriage of maximum loads, or the aircraft is subject to contamination by pesticides or herbicides, the airworthiness inspection should be required and an operating limitation to this effect should be prescribed. It should be noted that the foregoing does not apply when the normal category operating limits have been exceeded while operating in the restricted category, however, the procedures in paragraph 422 of this staff instruction do apply.

- (3) If the DGCA inspector determines that the airworthiness inspection by the DGCA or an appropriately certificated mechanic is not necessary because of the nature of the special purpose, the operating limitation should so specify.
- (4) To ensure that each conversion of aircraft with multiple certificates is recorded, an operating limitation should prescribe that an aircraft maintenance record entry, signed by the person making the conversion, should be made each time the aircraft is converted from one category to the other. If an inspection per CASR part 21 sec. 21.187(b) is required, the entry should be signed only by a DGCA or an appropriately certificated and rated mechanic.

4019. SPECIAL PURPOSE OPERATIONS.

CASR part 21 sec. 21.25 specifies the special purpose operations for restricted category aircraft. Special purpose operations are not specified for limited category and standard aircraft.

4020. AIRWORTHINESS CERTIFICATES.

- a. If the requested multiple certification covers restricted and limited categories, a Special Airworthiness Certificate, DAAO Form No. 21-24, will be issued for each category with appropriate conditions and operating limitations issued with each certificate.
- b. If the requested multiple certification covers restricted category and standard, a Standard Airworthiness Certificate, DAAO Form No. 21-20, will be issued for the standard classification, and a Special Airworthiness Certificate, DAAO Form No. 21-24, with appropriate conditions and operating limitations, will be issued for the restricted category. A Standard Airworthiness Certificate, DAAO Form No. 21-20, or Special Airworthiness Certificate, DAAO Form No. 21-24 in the restricted category, should remain in the aircraft.

4021. OPERATING LIMITATIONS.

All restricted category aircraft must be operated in accordance with CASR part 91 sec.91.313, in addition to the operational requirements of CASR part 91. However, additional operating limitations may be prescribed by the certificating inspector as deemed necessary for safe operation. The appropriate operating limitations will be enumerated on a separate sheet and issued with the corresponding Special Airworthiness Certificate. The issuance date of the operating limitations will be shown on the face of the corresponding Special Airworthiness Certificate, DAAO Form No. 21-24.

4022. OPERATION WITH MULTIPLE AIRWORTHINESS CERTIFICATIONS (STANDARD AND RESTRICTED).

The primary requirements for a Standard Airworthiness Certificate are that the aircraft is found to be in conformity to the type design and in condition for safe operation. Any operations outside of the normal category operating limitations when in the restricted category, either weight or maneuvering, (unless properly approved as appropriate for an aircraft having a Standard Airworthiness Certificate) would render it impossible to determine the condition for safe operation when the aircraft is to be returned to normal category, unless a complete engineering evaluation is made. Such evaluation must determine the effects of overweight and maneuvering loads on the aircraft (including helicopters) components, and structure, to establish an inspection and/or replacement program that would return the aircraft to a condition for safe operation in the standard configuration. Unknown stresses and possible hidden damage to the aircraft structure may have resulted because of the weights, maneuvers, and speeds utilized for the restricted category operations. Therefore, to retain eligibility for return to a Standard Airworthiness Certificate after an aircraft has been operated in the restricted category, the following would apply:

- a. While being operated in the restricted category, any changes made to the aircraft that are to be retained when in normal category operation, or any operations that are outside of the normal category operating limitations must be approved in accordance with the regulations and procedures applicable to an aircraft having a Standard Airworthiness Certificate.
- b. If the TCDS for an aircraft includes normal and restricted category, and the maximum gross weight and/or other operating limitations for the restricted category are higher than that for normal category, the aircraft is NOT eligible for operation with a Standard Airworthiness Certificate, after having been operated in the restricted category, unless:
 - (1) The TCDS specifically states that the aircraft is eligible for operation in the normal category after having been operated at the limitations applicable to the restricted category or;
 - (2) If the TCDS does not have such a note or other reference, the operations outside of the normal category operating limitations including increased gross weights, must be DGCA- approved.

4023. DISPLAY OF MARKS ("RESTRICTED" OR "LIMITED").

The DGCA should determine if a method has been provided for displaying the word "RESTRICTED" or, when applicable, the word "LIMITED". The applicant should be advised that it is the operator's responsibility to display the word restricted or limited, when the aircraft is in that corresponding configuration, in accordance with CASR part 45 sec. 45.23(b).

4024-4026. RESERVED.

SECTION 4 LIMITED AIRWORTHINESS CERTIFICATION

4027. GENERAL.

CASR part 21 sec.21.189 provides for the issuance of an airworthiness certificate in the limited category.

4028. CERTIFICATION PROCEDURES.

The DGCA Inspector should follow the applicable certification procedures in Paragraph 4002.

4029. ELIGIBILITY.

- a. An applicant for the issuance of an airworthiness certificate in the "limited" category must show that the aircraft has been previously issued a limited category type certificate and that the aircraft conforms to that type certificate (CASR part 21 sec. 21.189).
- b. The DGCA must make the following determinations for aircraft to be issued an airworthiness certificate in the limited category:
 - (1) The aircraft is one of the type and models that have been issued limited type certificates and that the aircraft conforms to the requirements set forth in the pertinent limited category aircraft specification.
 - (2) In accordance with CASR part 21 sec. 21.189(a)(2), the applicant must flight check the aircraft; therefore, the DGCA should, upon application, issue an experimental certificate for this purpose. When the aircraft is subsequently submitted for limited certification, the DGCA should ensure that the findings of the flight check are entered in the aircraft log book and signed by the pilot who made the flights.
 - (3) Since surplus military aircraft may have been subjected to deterioration from prolonged storage or inactivity, the DGCA should ensure that the aircraft is subjected to a thorough, searching inspection to determine its state of preservation and repair and condition for safe operation. The applicant should be requested to provide all available documentation, such as technical orders and military records, to support the finding of airworthiness. The inspection may require removing rivets and cutting openings to check the condition of flying surfaces and closed areas. If the condition of the aircraft indicates that such work is necessary in order to make a finding to the satisfaction of the DGCA, it should be recommended to the applicant that issuance of the limited airworthiness certificate would be expedited if an airworthiness inspection is performed by an appropriately rated repair station or mechanic, in accordance with the requirements of CASR part 43.

4030. OPERATING LIMITATIONS.

All limited category civil aircraft must be operated in compliance with the limitations prescribed in CASR part 91 sec. 91.315. However, the DGCA may prescribe additional limitations as he deems necessary for safe operation. The additional operating limitations will be enumerated on a separate sheet and issued with the Special Airworthiness Certificate DAAO Form No. 21-24.

4031. DISPLAY OF MARKS (LIMITED).

The DGCA Inspector should determine if a method has been provided for displaying the word "LIMITED". The applicant should also be advised that it is the owner's responsibility to display the word "limited" in accordance with CASR part 45 sec. 45.23(b)

4032-4033. RESERVED.

SECTION 5 RESERVED

4034-4037. RESERVED.

SECTION 6 LIGHT-SPORT CATEGORY AIRCRAFT AIRWORTHINESS CERTIFICATIONS

4038. GENERAL.

A special airworthiness certificate in the light-sport category is issued to an aircraft that meets the definition of LSA, is manufactured to the applicable consensus standards, and is one of the following five classes of the LSA category: airplanes, gliders, powered parachutes, weight-shift-control aircraft (commonly called trikes), and lighter-than-air aircraft (balloons and airships). When the aircraft meets all the eligibility requirements of CASR part 1 sec. 1.1 and CASR part 21 sec. 21.190, it may be issued an airworthiness certificate in the LSA category. Excluded from obtaining a special airworthiness certificate in the LSA category are gyroplane aircraft and light-sport kit aircraft, which may receive an experimental purpose for operating LSA as addressed in chapter 4, section 8 of this SI.

- a. Definition. As defined in CASR part 1 sec. 1.1, a light-sport aircraft is an aircraft other than a helicopter or powered-lift that since its original certification has continued to meet the following:
- (1) A maximum takeoff weight of not more than 660 pounds (300 kilograms) for lighter- than-air aircraft; 1,320 pounds (600 kilograms) for aircraft not intended for operation on water; or 1,430 pounds (650 kilograms) for aircraft intended for operation on water.
 - (2) A maximum airspeed in level flight with maximum continuous power (VH) of not more than 120 knots calibrated airspeed under standard atmospheric conditions at sea level.
 - (3) A maximum never-exceed speed (VNE) of not more than 120 knots calibrated airspeed for a glider.
 - (4) A maximum stalling speed or minimum steady flight speed without the use of lift- enhancing devices (VS1) of not more than 45 knots calibrated airspeed at the aircraft's maximum certificated takeoff weight and most critical CG.
 - (5) A maximum seating capacity of no more than two persons, including the pilot.
 - (6) A single, reciprocating engine, if powered.
 - (7) A fixed or ground-adjustable propeller, if a powered aircraft other than a powered glider.
 - (8) A fixed or auto-feathering propeller system, if a powered glider.
 - (9) A fixed-pitch, semi-rigid, teetering, two-blade rotor system, if a gyroplane.
 - (10) A nonpressurized cabin, if equipped with a cabin.
 - (11) Fixed landing gear, except for an aircraft intended for operation on water or a glider.
 - (12) Fixed or repositionable landing gear, or a hull, for an aircraft intended for operation on water.
 - (13) Fixed or retractable landing gear for a glider.

NOTE : Although gyroplane aircraft (commonly known as gyrocopters) are identified in the light-sport aircraft definition of CASR part 1 sec. 1.1, gyroplane aircraft when meeting the LSA definition may only be issued an experimental certificate for the purpose of operating LSA because of the preclusion of CASR part 21 sec. 21.190(a).

- b. Eligibility. LSA are eligible for a special airworthiness certificate in the LSA category in accordance with CASR part 21 sec. 21.190 when the aircraft has not been previously issued a standard, restricted, limited, or provisional airworthiness certificate, or an equivalent airworthiness certificate issued by a civil aviation authority outside the Republic of Indonesia, and the applicant provides a copy of the aircraft manufacturer's—
- (1) Written operating instructions in the English language.
 - (2) Written maintenance and inspection procedures for the entire aircraft in the English language.
 - (3) Flight training supplement in the English language.
 - (4) Statement of compliance as described in CASR part 21 sec. 21.190(c). A sample of DAAO Form No. 21-41, LSA Statement of Compliance, is located in Chapter 4 Figure 4.1. Form 21-41 must contain:
 - (a) The identity of the aircraft by make and model, serial number, class, date of manufacture, and consensus standard used;
 - (b) A statement that the aircraft meets the provisions of the identified consensus standard;
 - (c) A statement that the aircraft conforms to the manufacturer's design data, using the manufacturer's quality assurance system that meets the identified consensus standard;
 - (d) A statement that the manufacturer will make available to any interested person the following documents that meet the identified consensus standard:
 - i. The aircraft's operating instructions;
 - ii. The aircraft's maintenance and inspection procedures for the entire aircraft; and
 - iii. The aircraft's flight training supplement; and
 - (e) A statement that the manufacturer will monitor and correct safety-of-flight issues through the issuance of safety directives and a continued airworthiness system that meets the identified consensus standard;
 - (f) A statement that at the request of the DGCA, the manufacturer will provide unrestricted access to its facilities; and
 - (g) In accordance with a production acceptance test procedure meeting the applicable consensus standard, a statement that the manufacturer—
 - i. Ground and flight tested the aircraft;
 - ii. Found the aircraft performance acceptable; and
 - iii. Determined the aircraft is in a condition for safe operation.
- c. Eligible Light-Sport Aircraft Manufactured Outside the Republic of Indonesia. For an aircraft that has been manufactured outside Republic of Indonesia to be eligible for a special airworthiness certificate in the light-sport category, an applicant must provide evidence to the DGCA that the aircraft meets the definition of light-sport category according to CASR part 1 sec. 1.1 and the requirements of CASR part 21 sec.21.190(b). In addition, in

accordance with sec. 21.190(d), an applicant must provide proof of the following:

- (1) The aircraft manufactured outside the Republic of Indonesia is eligible for an airworthiness certificate, flight authorization, or other similar certification in its country of manufacture. Verification of this eligibility is through a statement from the manufacturer in the aircraft documentation that had the aircraft remained in the country of export, the aircraft would have been eligible for an airworthiness certificate, flight authorization, or other similar certification.
- (2) When an aircraft manufactured outside the Republic of Indonesia meets the definition of LSA in accordance with CASR part 1 sec. 1.1 and is not eligible per CASR part 21 sec. 21.190(b), the aircraft may be eligible for an experimental LSA certificate in accordance with sec. 21.191(i). Guidance on experimental LSA certification is given in paragraph xxx of this Staff Instruction.

d. Light-Sport Aircraft Construction. The manufacturer of an aircraft for airworthiness certification in the light-sport category must manufacture the aircraft to the design requirements and quality system of the applicable consensus standard that has been accepted by the DGCA. To meet the intent of CASR part 21 sec. 21.190 and to be eligible for an airworthiness certificate for LSA category, the applicant must present satisfactory evidence that the aircraft was manufactured and found acceptable to the provisions of the applicable consensus standard. Evidence of acceptability is provided by the light-sport aircraft manufacturer's statement of compliance, Form 21-xx, attesting to compliance with the requirements of sec. 21.190. The following are clarifications of consensus standards and requirements for construction of LSA as it relates to certification in this category:

- (1) The manufacturer of LSA must use those components and equipment that are in accordance with the applicable consensus standard design requirements. The use of used, overhauled, or reconditioned components and assemblies will be provided for in the LSA manufacturer's maintenance and inspection procedures in accordance with the consensus standards.
- (2) The manufacturer is not required to be a production approval holder for LSA, and LSA do not receive a type certificate. For an aircraft to be eligible within the light-sport category, the aircraft manufactured cannot be a type-certificated aircraft. Light-sport category aircraft are constructed only to the applicable consensus standards.
- (3) In accordance with sec.21.190(b) and (c), the manufacturer must provide the aircraft's maintenance and inspection procedures.
- (4) In accordance with sec. 21.190(c), the manufacturer must perform an acceptance test of the aircraft with the requirements necessary to prove the aircraft's reliability and functionality. The manufacturer verifies the aircraft's proper function on the ground and in flight according to the applicable consensus standard. The manufacturer must document the acceptance test results and determine whether the aircraft is in a condition for safe operation. All production aircraft must obtain a special

flight permit in accordance with sec. 21.197 to accomplish flight test requirements.

- (5) A manufacturer that issues the statement of compliance is responsible for the quality of the LSA end product. The manufacturer's quality assurance responsibility includes material supplied and assembly work performed by other persons, including dealers, and distributors acting as an extension of the manufacturer.
 - (6) An LSA that has not been completed during the manufacturing process and for which the manufacturer does not maintain oversight of assembly as addressed (if any) in the consensus standard cannot be eligible for special airworthiness certification in the light-sport category. However, the aircraft may be eligible for an experimental light-sport certificate in accordance with CASR part 21 sec. 21.191(i) and 21.193(e). Guidance on experimental LSA certification is given in paragraph 4082 of this Staff Instruction.
 - (7) Before production flight testing, the aircraft must be registered in accordance with CASR part 47 and be issued an appropriate flight permit.
- e. Advising Applicants.
- (1) DGCA inspection of an aircraft will be limited to a general airworthiness inspection when the aircraft is submitted for airworthiness certification. The FAA will not perform any of the fabrication, construction, assembly, testing, manufacturer's quality inspections, and closing work on or to the aircraft.
 - (2) When the prospective applicant contacts the DGCA to inquire about the certification process for a LSA category, the DGCA should provide the applicant with the applicable forms and any guidance necessary to ensure a thorough understanding of applicable regulations.

Note: When applicable, advise the applicant of the ability to use the DGCA website to obtain requested forms and information.

- (3) The applicant, when applying for an airworthiness certificate, should be advised on how and where to submit the appropriate application(s) and documentation to the DGCA. The DGCA, when requested, should furnish the following forms:
 - (a) Aircraft Registration Application, DAAO Form No. 47-11;
 - (b) Application for Airworthiness Certificate, DAAO Form No. 21-21,
 - (c) Affidavit of Ownership for Aircraft,
- (4) At the time of airworthiness certification.
 - (a) The aircraft should be complete in every respect, and
 - (b) The applicant must submit all required documentation. If the applicant cannot or will not provide the necessary documentation, the applicant should be advised that the aircraft cannot be certificated as an LSA until satisfactory evidence is provided to substantiate that the aircraft complies with CASR part 21 sec 21.190, 21.191, and 21.193.
- (5) Advise the applicant to provide the LSA manufacturer's documented accurate weight of the aircraft in accordance with established weight and balance or weight and loading procedures to determine the aircraft's empty, gross, and most

forward and aft CG location, including the weight and balance or weight and loading calculations from the initial flight. The completed weight and balance report, including load limits for flight personnel, oil, fuel, and any cargo carrying capabilities, should be available in the aircraft, along with the other applicable placards, listings, and markings required by CASR part 91 sec. 91.9.

4039. CERTIFICATION PROCEDURES.

The procedures in this section provide guidance material associated with airworthiness certification and the issuance of DAAO Form No. 21-24 for the light-sport category.

- a. General. The DGCA airworthiness certification process consists of a general airworthiness inspection to determine the aircraft is in a condition of safe operation, in accordance with CASR part 21 sec. 21.190(b)(3). The inspection is accomplished after the aircraft is completed and before the issuance of the airworthiness certificate. When a manufactured LSA inspection is completed, the DGCA will have reviewed the applicant's documentation supplied with the aircraft, verifying it agrees with the identification, description, and applicable regulations. In no instance will the DGCA perform any of the fabrication, construction, assembly, or closing work on or to the aircraft.
- b. Record Inspection and Document Review. The DGCA must:
 - (1) Obtain from the applicant a properly executed DAAO Form No. 21-21 and any other documents required for the certification.
 - (2) Obtain from the applicant the aircraft's operating instructions, maintenance instructions, and flight training supplement, and the light-sport aircraft manufacturer's statement of compliance, DAAO Form No. 21-41.
 - (3) Review the documentation provided by the applicant to determine that the registration requirements of CASR part 47 have been met, and ensure the aircraft is marked in accordance with CASR part 45.
 - (4) Review the aircraft records to determine whether the required production flight test and inspections have been accomplished, as appropriate.

NOTE: CASR Part 43 requirements are not applicable before original certification.

 - (5) Review the applicant's weight and balance or weight and loading data for accuracy for the aircraft submitted.
- c. Aircraft Inspection. The DGCA should arrange with the applicant to make the aircraft available for inspection to determine the following:
 - (1) The ID plate meets the requirements CASR part 45 sec. 45.11, as applicable
 - (2) The information on the ID plate is correct, matches the information on DAAO Form No. 21-21, and is in accordance with CASR part 45 sec. 45.13, as applicable.
 - (3) The aircraft nationality and registration marks are in accordance with CASR 45 and, as applicable, with sec. 45.21, 45.23, 45.25, 45.27, and 45.29.

- (4) The flight control systems and associated instruments operate properly.
 - (5) The instruments are appropriately marked and needed placards are installed with placement for easy reference.
 - (6) System controls when equipped (for example, fuel selector(s) and electrical switches/breakers) are appropriately placed, clearly marked, provide easy access and operation, and function in accordance with the manufacturer's specifications and applicable consensus standard.
 - (7) An ELT is installed, as required CASR part 91 sec. 91.207.
 - (8) Airframe emergency parachutes are properly marked and identified.
- d. Certificate Issuance. Upon satisfactory completion of the records inspection, document review, and aircraft inspection, the DGCA will issue the special airworthiness certificate and the operating limitations for that aircraft. The operating limitations will be attached to DAAO Form No. 21-24. The DGCA must review the operating limitations with the applicant to ensure a clear understanding of the limitations. Operating limitations under CASR part 91 sec. 21.190 may be prescribed as follows:
- (1) The manufacturer of the LSA is required to certify within the statement of compliance that the aircraft was ground and flight tested successfully, and is in condition for safe operation. The manufacturer must endorse the aircraft logbook with a statement certifying the applicable flight testing has been completed, therefore, the DGCA will not issue operating limitations to further demonstrate flight testing.
 - (2) The DGCA will prescribe operating limitations for the operation of an LSA for an unlimited duration, as appropriate.
 - (3) The DGCA may prescribe any additional limitations deemed necessary in the interest of safety.
 - (4) If the aircraft meets the requirements for the requested certification, the DGCA must:
 - (a) Make an electronic database entry.
 - (b) Issue DAAO Form No. 21-24, with appropriate operating limitations.
 - (c) Complete sections V and VIII of Form 21-21, in accordance with the instructions contained in chapter 8 of this Staff Instruction.
 - (d) Examine, review, and route the certification file in accordance with the instructions contained in chapter 8 of this Staff Instruction.
 - (5) If the aircraft does not meet the requirements for the certification requested and the airworthiness certificate is denied, the DGCA must:
 - (a) Write a letter to the applicant stating the reason(s) for denying the airworthiness certificate.
 - (b) Attach a copy of the denial letter to DAAO Form No. 21-21 to be made part of the aircraft record.
- e. Change of Airworthiness Certification from Experimental Light-Sport Aircraft Purpose to Light-Sport Aircraft Category Airworthiness Certificates. An LSA that has been previously issued an experimental airworthiness certificate may be eligible for certification in the light-sport category under the following conditions:

- (1) When the light-sport prototype aircraft has been flown by the manufacturer under an experimental R&D certificate (reference section 8 of this Staff Instruction, Prototype Aircraft Produced by a Light-Sport Kit Manufacturer) to ensure there are no adverse flight characteristics in accordance with CASR part 91 sec. 91.319(b), and the manufacturer provides the necessary documentation with the appropriate DAAO forms and applications. There is an DGCA aircraft inspection required and new operating limitations are issued for this aircraft, certificate, and category. A new DAAO Form No. 21-24 must be issued to reflect the new operating limitations, and the applicant must submit DAAO Form No. 21-21. Guidance for the new operating limitations is in paragraph 124.
 - (2) If the LSA was converted from a light-sport category airworthiness certificate to an experimental LSA certificate, the applicant seeking to return to the light-sport category must provide the following:
 - (a) All original documentation required in accordance with CASR part 21 sec. 21.190.
 - (b) A current manufacturer's statement of compliance.
 - (c) Proof of compliance with applicable safety directives, repairs, and safety modifications published by the manufacturer and documented in the aircraft's records in accordance with CASR part 43.
 - (d) A finding and statement that the aircraft was not altered and/or modified without manufacturer approval.
 - (e) Evidence that the required maintenance was accomplished and documented in the aircraft's records in accordance with CASR part 43, and, if not accomplished and documented, then an evaluation of its effect on flight safety was performed.
 - (f) Proof the aircraft was inspected and is in a condition for safe operation.
- f. LSA with Retroactive Statement of Compliance. For an aircraft meeting all the requirements for LSA under CASR part 21 sec. 21.190, but built before the acceptance of the consensus standard and that has not received an airworthiness certificate, the applicant must provide the following:
- (1) A retroactive manufacturer's statement of compliance assigned by serial number to the specific aircraft provided by the manufacturer. To receive a retroactive manufacturer's statement of compliance, the applicant must ask the manufacturer to determine if the aircraft is eligible for a statement of compliance and, if the aircraft (by serial number) complied with the applicable consensus standard at the time of manufacture. The manufacturer then must present to the applicant, if appropriate, all items needed for original issuance of a light-sport category airworthiness certificate per CASR part 21 sec. 21.190, including a retroactive statement of compliance by serial number. If the manufacturer refuses to present a retroactive statement of compliance, then the aircraft is not eligible for certification in this category.
 - (2) All documentation required for issuance of a light-sport category airworthiness certificate according to CASR part 21sec. 21.190,

except using the retroactive statement of compliance as the statement of compliance.

- (3) The aircraft's records and logbooks must show compliance to CASR part 91 sec. 91.319(b) and that the flight testing was completed using the applicable consensus standard and the manufacturer's production flight test acceptance criteria. All maintenance of and alterations to the aircraft must be documented in accordance with CASR part 43. Any changes to the aircraft must include the necessary approval from the manufacturer, and the incorporation of all applicable manufacturer's corrections of safety-of-flight issues must be documented in the aircraft records.
- g. **Transfer of Light-Sport Category Airworthiness Certificates.** An airworthiness certificate is transferred with the aircraft (CASR part 21 sec.21.179); for example, if there is a change of ownership or transfer of registration. There is no DGCA inspection required after transfer of an aircraft with its airworthiness certificate unless it is determined that revised operating limitations are necessary. In this case, a new DAAO Form No. 21-24 must be issued to reflect the new date of the revised operating limitations. Therefore, the applicant must submit DAAO Form No. 21-21. Aircraft records also must be transferred with change of ownership (section 91.419).

4040. PROTOTYPE AND PRODUCTION FLIGHT TESTING.

- a. **Flight Testing Purpose and Coordination.** The manufacturer must ground and flight test the LSA for the purpose of finding the performance acceptable and determining that each aircraft is in a condition for safe operation in accordance with CASR part 21 sec, 21.190(c).
- (1) The manufacturer must notify the DGCA of the intent to perform production flight testing on the LSA to the applicable consensus standard, and submit the proposed geographic flight testing locations a minimum of 30 days in advance of the initial proposed flight testing operations.

NOTE: The LSA manufacturer's production flight test plan must be in accordance with the applicable consensus standard.

- (2) A special flight permit may be issued for production flight testing to allow a manufacturer to meet the requirements of CASR part 91 sec. 91.203 when operating new production aircraft for the purpose of flight testing, as provided in CASR part 21 sec. 21.197. This permit must be used in conjunction with a valid Aircraft Certificate of Registration. The special flight permit is valid only for the purpose of production flight testing. The applicable operating limitations are printed in block B on the reverse side of DAAO Form No. 21-24.

NOTE: Production flight test operating limitations baseline guidance for light-sport category aircraft are described in paragraph 125 of this Staff Instruction.

- b. Eligibility for Production Flight Testing. A manufacturer producing LSA under CASR part 21 sec. 21.190 is eligible to obtain special flight permits for production flight testing provided the following conditions are met:
- (1) A prototype aircraft of that LSA model and configuration has been flown by the manufacturer under an experimental R&D certificate to ensure there are no adverse flight characteristics and that production test pilots are fully familiar with the aircraft.
 - (2) In conjunction with the applicable consensus standard, a production flight test procedure and checklist for the aircraft involved is used to ensure all requirements for production flight tests are fulfilled and entered into the aircraft's logbook.
 - (3) The aircraft is not flown by the manufacturer for purposes other than production flight tests.
 - (4) Limitations have been established to define the production flight test duration and area
- c. Application and Issue of Special Flight Permits for Production Flight Testing.
- (1) A manufacturer producing LSA under CASR part 21 sec. 21.190 is eligible to obtain special flight permits for production flight testing within the provisions established in this section. The LSA manufacturer or authorized person that has been included in and is operating under the oversight of the manufacturer's quality assurance plan must be the registered owner of each aircraft to be issued a special flight permit for production flight testing.
 - (2) Before issuing a special flight permit for production flight testing, each aircraft must be registered with a permanent registration number assigned. Evidence of aircraft registration may be shown by DAAO Form No. 47-02, Certificate of Aircraft Registration.
 - (3) An LSA manufacturer or authorized person must apply for a special flight permit for production flight testing using DAAO Form No. 21-21, Application for Airworthiness Certificate, for each aircraft needing a production flight test. Special flight permits are not transferable from one aircraft to another.
 - (4) When the applicant for a special flight permit is found in compliance with all requirements, the DGCA should issue Special Certificate of Airworthiness, DAAO Form No. 21-24 with the operating limitations specified in paragraph 123 of this Staff Instruction. The DGCA may impose any additional limitations deemed necessary for safe operation. The operating limitations must be enumerated on a separate sheet, identified by the aircraft registration and serial numbers, dated, and signed. The applicant should be advised that Special C of A must be displayed in the aircraft in accordance with CASR part 91 sec. 91.203(b).
 - (5) A copy of all certification documents for issuance of a production flight test permit should be retained in the DGCA Office.

4041. FLIGHT TEST AREAS.

- a. General.

The assigned test area is prescribed in accordance with CASR part 91 sec. 91.305. The DGCA will, when requested, assist applicants in selecting areas that comply with CASR part 91 sec. 91.305. The DGCA is required to evaluate each application to determine that the flight test area does not exceed that which is reasonably required to accomplish the program.

b. Assigned Flight Test Area.

All production flight-testing operations of LSA must be limited to the assigned flight test area until the aircraft is shown to be controllable throughout its normal range of speeds and all maneuvers to be executed, and has not displayed any hazardous operating characteristics or design features.

(1) In the case of flight testing an aircraft from an airport surrounded by a densely populated area, but with at least one acceptable approach/departure route of flight, the DGCA must ensure that a route of flight is selected that subjects the fewest persons and least property to possible hazards. The description of the area selected by the applicant and agreed to by the DGCA must be made a part of the operating limitations.

(2) In the case of an aircraft located at any airport surrounded by a densely populated area and lacking any acceptable approach/departure route of flight, the DGCA must deny the airworthiness certificate (special flight permit issued for production flight testing) and write a letter to the applicant stating the reason(s) for denying the proposed flight test area. The applicant must be advised to relocate the aircraft to an airport suitable for flight testing.

NOTE: An acceptable approach/departure route of flight may be considered to exist when the route of flight provides a reasonable opportunity to execute an off-airport emergency landing that will not jeopardize other persons or property.

4042. SPECIAL FLIGHT PERMIT FOR FLIGHT TESTING LIGHT-SPORT AIRCRAFT CATEGORY OPERATING LIMITATIONS.

a. Operating limitations must be designed to fit the specific situation encountered. The DGCA may impose any additional limitations deemed necessary in the interest of safety. The DGCA must review each imposed operating limitation with the applicant to ensure the applicant understands the operating limitation.

b. The following operating limitations must be prescribed for production flight testing LSA:

(1) No person may operate this aircraft for other than the purpose of meeting the requirements of CASR part 21 sec. 21.190(c)(7) during flight testing. In addition, this aircraft must be operated in accordance with applicable air traffic and general operating rules of CASR part 91 and all additional limitations herein prescribed. These operating limitations are a part of a special flight permit and are to be carried in the aircraft at all times and be available to the pilot in command of the aircraft.

(2) All flights must be conducted within the geographical area described as follows. The area must be described by radius,

coordinates, and/or landmarks. The designated area must be over open water or sparsely populated areas having light air traffic. The size of the area must be that required to safely conduct the anticipated maneuvers and tests.

- (3) All flight tests must be conducted and recorded in accordance with the manufacturer's production acceptance test procedure.
- (4) This aircraft is to be operated under VFR, day only.
- (5) The production test pilot in command of this aircraft must hold at least a private pilot certificate, have obtained the appropriate logbook endorsements to act as pilot in command, and have a minimum of 100 hours as pilot in command in that category and class.
- (6) The production test pilot is to be the sole occupant.

4043. ISSUANCE OF LIGHT-SPORT CATEGORY AIRCRAFT OPERATING LIMITATIONS.

- a. Operating limitations must be designed to fit the specific situation encountered. The DGCA may impose any additional limitations deemed necessary in the interest of safety. The DGCA must review each imposed operating limitation with the applicant to ensure the applicant understands the operating limitations.
- b. The following operating limitations, as applicable, will be issued as shown below; any deviation must be coordinated in accordance with this Staff Instruction:
 - (1) No person may operate this aircraft for any other purpose than that for which the aircraft was certificated. This aircraft must be operated in accordance with applicable air traffic and general operating rules of CASR part 91 and all additional limitations prescribed herein. These operating limitations are a part of DAAO Form No. 21-24 and are to be carried in the aircraft at all times and to be available to the pilot in command of the aircraft.
 - (2) The pilot in command of this aircraft must advise the passenger of the special nature of this aircraft and that the aircraft does not meet the certification requirements of a standard certificated aircraft.
 - (3) This aircraft must display the word —light-sport□ in accordance with CASR part 45 sec. 45.23(b).
 - (4) This aircraft must contain the placards and markings as required by CASR part 91 sec. 91.9. In addition, the placards and markings must be inspected for legibility and clarity, and the associated systems inspected for easy access and operation, to ensure they function in accordance with the manufacturer's specifications during each condition inspection.
 - (5) This aircraft is to be operated under VFR, day only, unless appropriately equipped for night and/or instrument flight in accordance with CASSR part 91 sec. 91.205, and when allowed by the manufacturer's operating instructions
 - (6) Noncompliance with these operating limitations will render the airworthiness certificate invalid. Any change, alteration, or repair not in accordance with the manufacturer's instruction and approval will render the airworthiness invalid, and the owner of the aircraft must apply for a new airworthiness certificate under the provision of CASR part 21 sec. 21.191 with appropriate operating limitations before further flight.

- (7) Application to amend these operating limitations must be made to the DGCA.
- (8) This aircraft does not meet the requirements of the applicable, comprehensive, and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. The owner/operator of this aircraft must obtain written permission from another CAA before operating this aircraft in or over that country. That written permission must be carried aboard the aircraft together with the airworthiness certificate.
- (9) The pilot in command of this aircraft must hold at least the appropriate category and class privileges, rating, or endorsements required by part 61.
- (10) No person may operate this aircraft in the light-sport category for compensation or hire except to tow a light-sport glider or an unpowered ultralight vehicle in accordance with CASR part 91 sec. 91.309 or to conduct flight training.
- (11) This aircraft may only be operated in accordance with the manufacturer's aircraft operating instructions, including any provisions for necessary operating equipment specified in the aircraft's equipment list.
- (12) No person may operate this aircraft in the light-sport category for compensation or hire unless within the preceding 100 hours of time in service the aircraft has:
 - (a) Been inspected by a certificated repairman with an LSA maintenance rating, or an appropriately rated mechanic, or an appropriately rated repair station in accordance with inspection procedures developed by the aircraft manufacturer or a person acceptable to the DGCA, and has been returned to service in accordance with the applicable provisions of CASR part 43;
 - (b) Received an annual condition inspection in accordance with limitation; or
 - (c) Received an inspection for the issuance of an airworthiness certificate in accordance with CASR part 21.
- (13) Aircraft instruments and equipment installed and used under CASR part 91 sec. 91.205 must be inspected and maintained in accordance with the requirements of CASR part 91. Any maintenance or inspection of this equipment must be recorded in the aircraft maintenance records.
- (14) No person will operate this aircraft unless within the preceding 12 calendar months it has had a condition inspection performed in accordance with the manufacturer's maintenance and inspection procedures, and was found to be in a condition for safe operation. As part of the condition inspection, cockpit instruments must be appropriately marked and needed placards installed in accordance with CASR part 91 sec. 91.9. This inspection will be recorded in the aircraft maintenance records.
- (15) Condition inspections must be recorded in the aircraft maintenance records showing the following, or a similarly worded, statement: "I certify that this aircraft has been inspected on [insert date] in accordance with the manufacturer's maintenance and inspection procedures, and was found to be in a condition for safe operation". The entry will include the aircraft's total time-in-service, and the name, signature,

certificate number, and type of certificate held by the person performing the inspection.

- (16) No person may operate this aircraft in the light-sport category unless it is continuously maintained in compliance with CASR part 91 sec. 91.327(b).

4044. LIGHT-SPORT AIRCRAFT STATEMENT OF COMPLIANCE.

This statement of compliance also is referred to as the Manufacturer's Statement of Compliance. It is required by CASR part 21 sec. 21.190 (b) (1) (iii) and 21.193 (e) (4), and is described in 21.190(c), which details the requirements of the Manufacturer's Statement of Compliance in DAAO Form No. 21-41.

4045-4070. RESERVED

SECTION 7 EXPERIMENTAL CERTIFICATES

4071. GENERAL.

Any ROI registered aircraft that does not have a current airworthiness certificate certifying that the aircraft conforms to a type certificate cannot be legally operated unless it has been issued an experimental certificate or a special flight permit. Included in the operations requiring the issuance of experimental certificates are those involving flight tests of certificated aircraft which have undergone design changes which may adversely affect the structural integrity, performance, or flight characteristics.

- a. An experimental airworthiness certificate may be issued to an aircraft located in or outside of the Republic of Indonesia that is intended for continual operation in another country when it meets the following requirements:
 - (1) The CAA of the country in which the aircraft is located or intended to fly has authorized operation of the aircraft.
 - (2) The Flight Standards will have appropriate oversight of the aircraft during the period of operation.

- b. Experimental Airworthiness Certificate, Purpose. THE PURPOSE (S) MUST BE SHOWN ON THE CERTIFICATE AND ON THE OPERATING LIMITATIONS. Amendment of the certificate to change the purpose requires submittal of an Application for Airworthiness Certificate, DAAO Form No. 21-21, together with other required data if applicable. CASR21.191 defines the operations authorized under each purpose. The following paragraphs will be confined to information of a clarifying or procedural nature.
 - (1) Research and Development. Generally any aircraft would be eligible for an experimental certificate under this purpose. Although the operations may eventually lead to type certification, they may be conducted by the applicant only as a matter of pure research or to determine whether an idea warrants further development. In addition to the operation specified in Section 21.191(a), the operation of a chase plane, tanker used for in flight icing tests or other aircraft not otherwise eligible for a standard or an experimental certificate (research and development), but necessary for use in direct connection with the research and development project, is considered to be within the scope of this purpose.
 - (2) Showing Compliance with Regulations. This purpose would be considered valid when the TC holder is revising the TC design data or a modifier applied for a TC. In addition to the operations specified in Section 21.191(b), the operation of a chase plane, tanker used for in flight icing tests or other aircraft not otherwise eligible for a standard or an experimental certificate (showing compliance with regulations), but necessary for use in direct connection with a type certification project, is considered to be within the scope of this purpose.
 - (3) Crew Training. Under Section 21.191(c), this purpose is limited to only the applicant's flight crews, which normally would be the manufacturer's employees necessary to be trained in experimental aircraft for subsequent operation of aircraft being

- flight tested in type certification programs, or for production flight testing. . (Crew training of the manufacturer's customers in experimental aircraft is covered under "market survey").
- (4) Exhibition. The operations permissible under this purpose are clearly defined in Section 21.191(d). Operating an aircraft to demonstrate its flight characteristics or capabilities in connection with sales promotions for the aircraft is not considered to be an eligible operation under exhibition. A certificate for experimental exhibition should only be issued when an aircraft will be used for valid exhibition purposes. Experimental exhibition should not be issued when there is any evidence of intent to circumvent the standard airworthiness requirements.
 - (5) Air Racing. The operations permissible under this purpose are clearly defined in Section 21.191(e). A certificate for experimental-air racing should only be issued when an aircraft will be used for valid air racing purposes. Experimental-air racing should not be issued when there is any evidence of intent to circumvent the standard airworthiness requirements.
 - (6) Market Surveys. A R.I. manufacturer of Aircraft or engines may apply for a Special Airworthiness Certificate in the experimental category for the purpose of market surveys, sales demonstrations, and customer crew training (reference Section 21.195). Sales demonstrations and customer crew training are also authorized under Section 21.191(f). The DGCA inspector must ensure that the provisions of Section 21.195 are met before issuing the experimental certificate, and that the applicant gives the estimated time or number of flights required for the market survey operation and the area or itinerary over which the operations will be conducted (CASR 21.193)(d)(2) and (3)). The duration of the certificate should be limited to only the time needed for the described operations, and normally not to exceed 90 days, except that a longer duration may be given for a PC holder who has an approved procedure for experimental operations. An experimental certificate for market surveys should not be issued when there is any evidence of intent to circumvent the standard airworthiness requirements.
 - (7) Operating Amateur-Built aircraft. Under the provisions of CASR part 21 sec. 21.191(g), amateur-built aircraft are those aircraft which have been fabricated and assembled by persons who undertook the construction project solely for their own education or recreation.
 - (8) Operating light-sport aircraft, a certificate for experimental-light-sport aircraft should only be issued when an aircraft has been issued from aircraft kit and previously has been issued special airworthiness certificate in the light-sport category in accordance with CASR part 21 sec. 21.190.
- c. Experimental Airworthiness Certificates, Multipurpose. An experimental airworthiness certificate may be issued for more than one of the purposes. When more than one purpose is requested, the DGCA must ensure that adequately controlled conditions exist as specified in the operating limitations. When issuing an airworthiness certificate for the purposes of R&D, showing compliance with regulations, crew training, or market surveys, the certificate should be made effective for only the length of time reasonable to accomplish the

applicant's program, and not to exceed 1 year. The issuance of multiple-purpose certificates for R&D and showing compliance should be limited to PC holders and modifier. This may be extended to modifiers only when adequately substantiated, for example, for complex programs. Applicants for a multiple-purpose certificate must justify the requested purposes to the satisfaction of the DGCA. PC holders and modifiers may submit to the DGCA for approval of a procedure that meets the requirements of paragraph 478.

- d. The requirements for issuing experimental certificates are contained in CASR part 21 sec. 21.191, 21.193, and 21.195.
- e. For the purpose of this chapter, type certification programs include TC and STC, as well as amendments to either.
- f. Section 91.319 prescribes operating limitations that are applicable to all aircraft having experimental certificates. In addition, the DGCA may prescribe other limitations as may be considered necessary under CASR part 91 sec. 91.319(i).
- g. To operate under phase II operating limitations, the owner/operator must make a signed logbook entry attesting to meeting the requirements of Part 91 sec. 91.319(b).
- h. The DGCA must determine that the aircraft displays nationality and registration marks in accordance with CASR part 45 sec. 45.21 and that the word "EXPERIMENTAL" is displayed in accordance with CASR part 45 sec. 45.23.

4072. ELIGIBILITY.

- a. For an aircraft to be eligible for the issuance of an experimental certificate, the aircraft must be registered and the applicant must satisfy one or more of the purposes stated in CASR 21.191, as further discussed in Chapter 4 section 7 through 10. The requirements for issuing experimental certificates are contained in CASR 21.191, 21.193, and 21.195 and, for policy guidance, in related advisory circulars.
- b. In assuring compliance with CASR 21.193(d), the following must be described in the applicant's program letter:
 - (1) Purpose of Experiment, CASR part 21 sec. 21.193(d)(1). An applicant must submit a program letter that describes the purpose of the experiment and the aircraft configuration, and outlines the program objectives. The letter must be detailed enough to permit the DGCA to prescribe the conditions and limitations necessary to ensure safe operation of the aircraft. The letter should not describe everything in minute detail. The use of the same aircraft for overlapping programs is not precluded and the program letter can outline one or more programs. Upon showing compliance with CASR part 21 sec. 91.319(b), the aircraft can be used to support other aircraft in the program or other experimental programs the manufacturer/applicant has underway, for example, to support flight crew movements, to be used as a chase plane, to carry spare engines, etc. This support activity, in addition to the purpose for which the certificate is to be issued, should be

included in the program letter or be included in the procedure described in paragraph 4127 of this SI.

Note: A new program letter will be required when significant changes to the aircraft configuration and program objectives are planned.

- (2) Time or Number of Flights (CASR part 21 sec. 21.193(d)(2). The applicant's program letter must include the estimated time or number of flights required to accomplish his program. The DGCA will evaluate the request in comparison to the program in order to realistically establish the time duration of the Special Airworthiness Certificate and to establish appropriate and necessary operating limitations.
- (3) Areas. The applicant must provide in the program letter sufficient detail to describe the areas over which the flights are to be conducted. It is the responsibility of the DGCA Inspector to establish boundaries of the flight test area, and in densely populated areas or congested airways takeoff, departure and landing approach corridors that ensure that hazards to which persons and property are subjected are minimized.
- (4) Describe Aircraft Configuration. Except for aircraft converted from a TC, the applicant must describe the aircraft's external configuration. The use of three-view sketches and three-dimensional photographs is acceptable.
- (5) Program Letter. Figure 4-2 of this Staff Instruction shows a sample program letter that an applicant can use or expand upon as needed.

4073. RESERVED.

4074. RESERVED.

4075. FLIGHT TEST AREAS.

- a. General. CASR part 91 sec. 91.319(b) requires that an unproven aircraft be assigned to a flight test area until it is shown to be controllable and has no hazardous design or operating features. (An unproven aircraft is one that: (1) has not shown that it is controllable throughout its normal range of speeds and throughout all maneuvers to be executed; and (2) has not shown that it has no hazardous operating characteristics or design features.) The assigned test area is prescribed in accordance with CASR part 91 sec. 91. 305. DGCA, when requested, should assist applicants in selecting areas which comply with CASR 91.305. The DGCA is required to evaluate each application to determine that the flight test area does not exceed that which is reasonably required to accomplish the program. All actions pertaining to flight test areas should be coordinated with the nearest office of the Air Traffic Service office.
- b. Assigned Flight Test Areas. Under CASR part 91 sect. 91.319(b) and 91.305, all initial flight operations of experimental aircraft must be limited to the assigned flight test area until such time as the aircraft is shown to be controllable throughout its normal range of speeds and

all maneuvers to be executed, and that it has displayed no hazardous operating characteristics or design features. The DGCA should establish the boundaries of the flight test area, including takeoff, departure, and landing approach corridors, if required for flight operations between the flight test area and the airport used as the base of operations.

- (1) In the case of the first flight of an aircraft from an airport surrounded by a densely populated area, and in a congested airway, but with at least one acceptable approach/departure corridor the DGCA must ensure that a flight corridor is selected where the least number of persons and property may be subjected to possible hazards. In addition, upon leaving such an airport, the aircraft should be required to operate from an outlying airport until its controllability, airworthiness, and safety are established, after which the aircraft may return to its base and use the established corridor for subsequent operations. The description of the area selected by the DGCA Inspector should be made a part of the operations limitations.
- (2) In the case of an aircraft located at any airport surrounded by a densely populated area and lacking any acceptable approach/departure corridor, the DGCA must deny the airworthiness certificate and process the denial in accordance with paragraph 4002 of this staff instruction. The applicant must be advised to relocate the aircraft by other means to a suitable airport.

Note: An acceptable approach/departure corridor exists when the corridor provides reasonable opportunity(s) to execute an off-airport emergency landing that will not jeopardize other persons or property.

- c. Operation Within an Assigned Flight Test Area. Except for amateur-built aircraft, there are no specific flight time requirements for operation within an assigned flight test area. Each case must be judged on the individual conditions, such as the type and complexity of the aircraft and other variables except for amateur-built aircraft. For example, flight testing in conjunction with an STC modification may require only one hour in an assigned flight test area while the initial operation of a prototype jet aircraft or a military surplus jet aircraft may require twenty or more hours before the requirements of CASR part 91 sec. 91. 319(b) can be met. In any event, the DGCA should not amend the operating limitations to permit flight outside of the assigned flight test area until the applicant shows and the DGCA finds compliance with CASR part 91 sec. 91. 319(b). This finding by the DGCA may be a review of the aircraft records containing a statement by the pilot that the aircraft is controllable etc., has no hazardous operating characteristics as required by CASR part 91 sec. 91. 319(b) and the maintenance history while in the test area was satisfactory. The certificating inspector may witness flights or inspect the aircraft if deemed necessary. A new application must also be submitted. PC holders may show compliance with CASR part 91 sec. 91. 319(b) in accordance with their DGCA approved experimental operating procedure (see paragraph 4127).

d. Aerobatics

- (1) Aerobatics maneuvers may be permitted while the aircraft is in the assigned flight test area if, in the certificating inspector's judgment, the aircraft has the capability of such flight. However, these maneuvers should not be attempted until sufficient flight experience has been gained to establish that the aircraft is satisfactorily controllable.
- (2) Aerobatics maneuvers which have been demonstrated in the assigned flight test area should be recorded in the aircraft maintenance record. Only those acrobatic maneuvers which have been successfully accomplished should be permitted after leaving the assigned flight test area. Appropriate limitations, which identify the maneuvers and conditions under which they may be performed, should be prescribed.
- (3) Those aircraft owners/operators wishing to include new aerobatic maneuvers will need to make a request for a new flight test area and follow the same conditions as noted in paragraph 443 d (2) of this Staff Instruction.

4076. OPERATION OUTSIDE FLIGHT TEST AREAS.

- a. Aircraft which have satisfied the requirements outlined under paragraph 4075 c. may be operated outside of an assigned flight test area. Except as provided for in para. 4075, operation of the aircraft outside an assigned flight test area will require issuance of a new experimental certificate with the new amended operating limitations.
- b. Prior to authorizing an aircraft to operate outside of an assigned flight test area, the DGCA should ensure the requirements of CASR part 91 sec. 91.9 and the limitations prescribed in section 7 through 11 of this chapter as applicable, have been satisfied and are made available in the aircraft. The DGCA should also develop and prescribe any others that he considers necessary in view of individual circumstances involved. Except for amateur-built aircraft, if any major changes are made to an aircraft after it has been approved for operation outside of an assigned flight test area, the DGCA must be notified and their response received in writing prior to flying the aircraft, e.g., returned to test area for X hours and have the aircraft inspected by persons identified in paragraph 137.b.(20), (21) or other persons specified by the DGCA. The DGCA may inspect the aircraft if deemed necessary. After the DGCA offices have been notified and the aircraft has been inspected a determination is made that the aircraft needs to return to a flight test area, an amended certificate should be applied for with new limitations as needed. A new DAAO Form No. 21-24 is required whenever operating limitations are amended, because the date of the old limitations on the corresponding certificate would not be the same as the date of the new limitations, and alteration of the certificate to change the date is not permitted.

4077-4080. RESERVED

SECTION 8 EXPERIMENTAL LIGHT-SPORT AIRCRAFT AIRWORTHINESS CERTIFICATIONS

4081. GENERAL.

As defined in CASR part 1 sec. 1.1 and the provisions of CASR part 21 sec. 21.191 and 21.193, an experimental purpose for the operation of LSA is categorized within six classes of aircraft: airplanes, gliders, powered parachutes, weight-shift-control aircraft (commonly called trikes), gyroplanes, and lighter-than-air aircraft (balloons and airships).

Note: An aircraft is not eligible for certification in LSA if there are any modifications, additions, or changes, approved by the manufacturer or not, that conflict with the definition of an LSA in CASR part 1 sec. 1.1, the eligibility requirements of CASR part 21, or the operating requirements of CASR part 91. If the aircraft is found ineligible, issue a denial letter.

- a. Eligibility. The following LSA are eligible in accordance with CASR part 21 sec. 21.191 (h)(1) for experimental airworthiness certificate:
 - Operational, previously not ROI.-registered ultralight-like vehicles not meeting CASR part 103 sec. 103.1, including gyroplanes that have not been issued a ROI. or foreign airworthiness certificate, and
 - Ultralight-like vehicles that previously obtained an operating exemption and for which the owner/operator applies for registration and receives an experimental LSA certificate.
 - (1) Light-sport kit aircraft or kit-built LSA eligible in accordance with CASR part 21 sec. 21.191(h)(2) for an experimental LSA airworthiness certificate must meet the following criteria:
 - (i) The aircraft is manufactured and assembled by the aircraft kit manufacturer issued a special airworthiness certificate in the LSA category for an aircraft of the same make and model in accordance with CASR part 21 sec. 21.193(e)(1).
 - (ii) The manufacturer's statement of compliance meets CASR part 21 sec. 21.190(c), except for sec. 21.190(c)(7).
 - (iii) The applicant is able to provide the aircraft documentation required by sec. 21.193(e).
 - (2) Aircraft previously issued an LSA category airworthiness certificate under sec. 21.190 are eligible for an experimental LSA airworthiness certificate.
-
- b. General Design and Construction.
 - (1) An experimental certificate under CASR part 21 sec. 21.191(h)(1) will no longer be issued. There is an existing fleet of LSA with experimental certificates for the purpose of operating an LSA under CASR part 21 sec. 21.191(h)(1). These aircraft did not have to meet the requirements of any consensus standard. These aircraft must not have been issued a ROI. or foreign airworthiness certificate of any type. They must continue to not meet the provisions of CASR part 103; they cannot be an ultralight vehicle. These aircraft must continue to be in a condition for safe operation as demonstrated through a review of

the aircraft records and flight history, and/or a series of flight tests.

- (2) An LSA manufacturer's kit may be eligible for an experimental certificate for the purpose of operating an LSA under sec. 21.191(h)(2) and 21.193, the aircraft must be assembled in accordance with the manufacturer's assembly instructions. Before certification, alterations to the kit components or deviations from the assembly process must be coordinated with and approved by the LSA kit manufacturer and documented in the aircraft records.
- (3) Aircraft previously issued a special airworthiness certificate in the light-sport category under aec. 21.190 may be eligible for an experimental certificate for the purpose of operating an LSA under sec. 21.191(i)(3). These aircraft have previously been flight tested and are not required to have additional flight testing unless they have been altered. All alterations must be recorded in the aircraft records before the original certification.
- (4) For a major change to the aircraft, the DGCA may modify the experimental LSA operating limitations with special restrictions for flight testing due to the aircraft modification.

c. Kit Assembly.

- (1) Eligible aircraft must be designed and assembled in accordance with the LSA kit manufacturer's assembly instructions. Accordingly, the detailed design data, quality systems, and procedures will not necessarily be the same as that of the holder of a type design and PC for the production of aircraft. The components of LSA kit aircraft are not necessarily held to the requirements of type-certificated or supplement type-certificated aircraft, or those of parts manufacturer approval status.
- (2) The LSA kit does not have to meet a major portion requirement. However, the applicant must show evidence that the LSA is properly assembled in accordance with the manufacturer's assembly instructions for that aircraft.

NOTE: The DGCA does not certify LSA manufacturer's kits or approve the kit manufacturers. The DGCA does not perform evaluations of LSA kits or LSA kit manufacturers, and no DGCA listing of approved or evaluated LSA kits or manufacturers will be provided.

d. Advising applicant.

- (1) The DGCA inspection of an experimental LSA will be limited to a general airworthiness inspection when the aircraft is submitted for airworthiness certification. The DGCA will not perform any progressive inspections during the construction or assembly of the aircraft. All advice, if any, given to the LSA kit builder by the DGCA should be made a matter of record for future reference. In no instance will the DGCA perform any of the fabrication, construction work, or assembly to the aircraft.
- (2) When the prospective LSA kit builder contacts DGCA office to advise the DGCA of the project, the DGCA should provide the prospective kit builder with the applicable forms and any guidance necessary to ensure a thorough understanding of applicable regulations.

- (3) An applicant seeking to obtain an experimental LSA certificate for a kit-built aircraft should be advised that the aircraft will have to be in compliance with CASR part 91 sec. 91.319(b). To show this compliance, the applicant must perform flight testing that addresses the requirements, goals, and objectives of the acceptance flight test. The flight test program will be developed in accordance with the manufacturer's aircraft operating instructions, maintenance and inspection procedures, and flight training supplement using the applicable consensus standard ground and flight testing procedures in conjunction with the operating limitations assigned. A flight test program demonstrates that the aircraft has been adequately tested and determined to be in a condition for safe operation within the aircraft's flight envelope in accordance with CASR part 91 sec. 91.319(b).
 - (4) The applicant seeking to obtain an experimental LSA certificate for a kit-built aircraft should be advised the aircraft must not be modified or altered without manufacturer's approval before initial certification.
 - (5) The DGCA office, when requested, should furnish an applicant for an experimental LSA certificate with the following forms:
 - (i) Aircraft Registration Application, DAAO Form No. 47-11;
 - (ii) Application for Airworthiness Certificate, DAAO Form No. 21-21
 - (iii) Affidavit of Ownership
 - (6) At the time of airworthiness certification:
 - (i) The aircraft should be complete in every respect, and
 - (ii) The applicant must submit all required documentation. Such documentation includes appropriate completed DGCA forms, the aircraft's documentation in accordance with CASR part 21 sec. 21.191 and 21.193, and, when applicable, the aircraft maintenance records in accordance with CASR part 43. If the applicant cannot or will not provide the appropriate documentation, the applicant should be advised that the aircraft cannot be certificated as an experimental LSA until satisfactory evidence is provided to substantiate that the aircraft's required documentation is complete.
- e. Weight and Balance.
- (1) Before certification, the applicant should accurately weigh the aircraft in accordance with established weight and balance or weight and loading procedures to determine the aircraft's empty, gross, and most forward and aft CG location, when applicable, including the weight and balance or weight and loading for the initial flight tests to help reduce stall, spin, and other control-related accidents. If the aircraft is constructed from a kit, the predetermined manufacturer's data should be used. The completed weight and balance or weight and loading report, including load limits for flightcrew (when applicable), oil, fuel, and any cargo carrying capabilities, should be available on the aircraft along with the other applicable placards, listings, and markings required by CASR part 91 sec. 91.9.
 - (2) Before certificating the aircraft, the DGCA should verify that the weight and balance or weight and loading data is accurate for that aircraft, that the aircraft has been weighed correctly,

and that the CG and its most forward and aft CG limits are established.

- f. Transfer of Airworthiness Certificates.
- (1) An airworthiness certificate is transferred with the aircraft (CASR part 21 sec. 21.179), for example, if there is a change of ownership. There is no DGCA inspection required after transfer of an aircraft with its airworthiness certificate unless it is determined that revised operating limitations are necessary. In this case, a new Form 21-24 must be issued to reflect the new date of the revised operating limitations. Therefore, the applicant must submit a properly completed Form 21-21.
 - (2) In some cases, an LSA may be sold with an expired airworthiness certificate that may be due to the expiration of the operating limitations. In such cases, an owner or authorized agent may request and receive an experimental airworthiness certificate for the purpose of operating LSA, only if the aircraft previously was certificated in this category. In this case, a new Application for Airworthiness, Form 21-21, is required before an airworthiness certificate can be issued along with operating limitations. To obtain a repairman certificate for that aircraft, the applicant must meet the requirements of CASR part 65.
- g. Prototype Aircraft Produced by a Light-Sport Kit Manufacturer. When a light-sport prototype aircraft is flown by the manufacturer under an experimental certificate to ensure there are no adverse flight characteristics (CASR part 91 sec. 91.319(b)) and the manufacturer provides the necessary documentation (CASR part 21 sec. 21.190) with the appropriate DGCA forms and applications, the aircraft is then eligible for transfer to LSA category certification.
- (1) An application for airworthiness certificate in the light-sport category or experimental light-sport aircraft purpose cannot be accepted for a manufacturer's prototype aircraft. The DGCA may issue an experimental certificate for the purpose of R&D as long as the applicant's flight test program is in accordance with the applicable consensus standard.
 - (2) Following termination of an R&D program, such prototype aircraft may be eligible for an LSA category certificate, or an experimental purpose with appropriate operating limitations issued for that purpose.
 - (3) LSA manufacturers also may be eligible to receive an experimental certificate (CASR part 21 sec. 21.191(f)) for the purpose of conducting market surveys, sales demonstrations, and customer crew training as provided in CASR part 21 sec. 21.195(a). The airworthiness certificate may be issued only after the applicant has satisfied the requirements of CASR part 21 sec. 21.195(d).

4082. CERTIFICATION PROCEDURES.

The procedures in this chapter provide guidance material associated with airworthiness certification and the issuance of DAAO Form No. 21-24.

- a. General. The DGCA airworthiness certification process consists of a general airworthiness inspection of the aircraft. It is accomplished after the aircraft is completed and before the issuance of an

experimental certificate. During this inspection, the DGCA may not request disassembly of the aircraft. The only time disassembly must be requested is when there is a question of safety that would endanger the general public. The applicant must provide documented evidence that the aircraft has been manufactured and constructed to the applicable consensus standard, except when the aircraft is eligible in accordance with CASR part 21 sec. 21.191(h)(1). The DGCA will review the applicant's documentation supplied with the aircraft to verify it agrees with the identification and description given in the applicable consensus standard, meets the definition of CASR part 1 sec. 1.1 for certification, and meets the requirements of CASR part 21 sec. 21.191 and 21.193 as applicable.

- b. Record Inspection and Document Review. The DGCA must:
- (1) Obtain from the applicant a properly executed DAAO Form No. 21-21 and any other documents required for the certification.
 - (2) Obtain from the applicant a program letter identifying the aircraft, the purpose of the certificate, the area over which the operations are to be conducted with drawings or photographs as required by CASR part 21 sec. 21.193(d)(4), and the duration of the program.
 - (3) Review documentation for LSA being certificated under CASR part 21 sec. 21.191(i)(2). A Statement of Compliance, DAAO Form No. 21-10, is required.
 - (4) Review the documentation provided by the applicant to determine that the registration requirements of CASR part 47 have been met, and ensure the aircraft is marked in accordance with CASR part 45.
 - (5) Review the aircraft records to determine whether any required maintenance and inspections have been accomplished and to determine that all relevant and applicable ADs and service directives have been complied with. Records must be complete.
 - (6) Review the applicant's weight and balance or weight and loading data for accuracy and currency for the aircraft submitted.
- c. Aircraft Inspection. The DGCA must arrange with the applicant to make the aircraft available for inspection to determine the following:
- (1) The ID plate meets the requirements of CASR part 45 sec. 45.11, as applicable.
 - (2) The information on the ID plate is correct, matches the information on Form 21-21, and is in accordance with CASR part 45 sec. 45.13, as applicable.
 - (3) The aircraft nationality and registration marks are in accordance with part CASR 45 sec. 45.23, 45.27, and 45.29.
 - (4) The flight control systems and associated instruments as equipped operate properly and are appropriate for each of the six classes of LSA.
 - (5) The cockpit instruments are appropriately marked, and needed placards are installed and placed for easy reference.
 - (6) System controls (for example, fuel selector(s) and electrical switches/breakers) are appropriately placed, clearly marked, provide easy access and operation, and function in accordance with the manufacturer's specifications and applicable consensus standard.
 - (7) An ELT is installed, when required (CASR part 91 sec. 91.207).

- d. Certificate Issuance. Upon satisfactory completion of the records inspection, documentation review, and aircraft inspection, the DGCA will issue the special airworthiness certificate for the purpose of operating an experimental LSA with appropriate operating limitations. The operating limitations must be attached to Form 21-24. The DGCA must review the operating limitations with the applicant to ensure a clear understanding. Ultralight-like vehicles that do not meet the definition of an ultralight vehicle in CASR part 103 sec. 103.1, but meet the definition of an LSA aircraft and will be used for compensation or hire for flight training, may be issued an airworthiness certificate and operating limitation. The DGCA may elect to issue an experimental LSA airworthiness certificate on a one-time basis to determine that the aircraft meets the requirements of CASR part 91 sec. 91.319(b).
- (1) If the aircraft meets the requirements for the certification, the DGCA must:
 - (i) Make an aircraft logbook entry.
 - (ii) Issue Form 21-24 with appropriate operating limitations.
 - (ii) Complete sections V and VIII of Form 21-21,
 - (iii) Examine, review, and route the certification file in accordance with the instructions contained in chapter 8 of this Staff Instruction.
 - (2) If the aircraft does not meet the requirements for the certification requested and the airworthiness certificate is denied, the DGCA must—
 - (i) Write a letter to the applicant stating the reason(s) for denying the airworthiness certificate.
 - (ii) Attach a copy of the denial letter to Form 21-21 to be made part of the aircraft record.

4083. FLIGHT TEST AREAS.

- a. General. CASR part 91 sec. 91.319(b) requires that an unproven aircraft be assigned to a flight test area. The assigned test area is prescribed in accordance with CASR part 91 sec.91.305. The DGCA, when requested, should assist applicants in selecting areas that comply with CASR part 91 sec. 91.305. The DGCA is required to evaluate each application to determine that the flight test area does not exceed what is reasonably required to accomplish the program. Actions pertaining to flight test areas must be coordinated with the nearest office of the Air Traffic Service.
- b. Assigned Flight Test Area. Under CASR part 91 sec. 91.305 and 91.319(b), all initial flight operations of experimental aircraft must be limited to the assigned flight test area until the aircraft is shown to be controllable throughout its normal range of speeds and all maneuvers to be executed, and has not displayed any hazardous operating characteristics or design features.
 - (1) In the case of the first flight of an aircraft from an airport surrounded by a densely populated area, but with at least one acceptable approach/departure route of flight, the DGCA must ensure that a route of flight is selected that subjects the fewest persons and least property to possible hazards. In addition, upon leaving such an airport, the aircraft should be required to operate from an outlying airport until its controllability and safety are established, after which the aircraft may return to

its base and use the established corridor for subsequent operations. The description of the area selected by the applicant and agreed to by the DGCA must be made a part of the operating limitations.

- (2) In the case of an aircraft located at any airport surrounded by a densely populated area and lacking any acceptable approach/departure route of flight, the DGCA must deny the airworthiness certificate and process the denial in accordance with paragraph 87. The applicant must be advised to relocate the aircraft by other means to a suitable airport.

NOTE: An acceptable approach/departure route of flight may be considered to exist when the route of flight provides a reasonable opportunity to execute an off-airport emergency landing that will not jeopardize other persons or property.

- c. Assignment to the Flight Test Area. Although the period of assignment is not established by regulation, the following time is suggested as a guideline when issuing airworthiness certificates for experimental LSA:
 - (1) LSA issued original experimental airworthiness certificates must be limited to operation within an assigned flight test area for a minimum of 5 hours for all classes of LSA to determine aircraft controllability throughout its design limits.
 - (2) Previously non certificated ultralight-like vehicles or other aircraft that meet the definition of an LSA as defined in CASR part 1 sec. 1.1 should not be limited to operation within an assigned flight test area, provided the following are met:
 - (i) Evidence is shown of routine inspections; and
 - (ii) It is shown through flight records that the aircraft is controllable throughout its normal range of speeds and throughout all maneuvers to be executed, and has no hazardous operating characteristics or design features; and
 - (iii) All aircraft records are presented.
 - (3) Aircraft previously issued a special airworthiness certificate in the light-sport category under CASR part 21 sec. 21.190, applying for an experimental certificate for the purpose of operating LSA under CASR part 21 sec. 21.191(h)(3), may not be required to complete a flight test program under phase I. The applicant must provide evidence that no major modifications or unapproved changes were made after the issuance of the original airworthiness certificate.
 - (4) Following any major change, an LSA must be assigned to a flight test area for an appropriate time to conduct a flight test and evaluate that the aircraft is in a condition for safe operation. The guidance baseline for this testing is 5 hours of flight time within the flight test area.
- d. Operation Outside the Flight Test Area. During operation outside the flight test area, the following placard must be displayed in the aircraft in full view of all occupants: -PASSENGER WARNING - THIS AIRCRAFT IS AN EXPERIMENTAL LIGHT-SPORT AIRCRAFT AND DOES NOT COMPLY WITH CIVIL AVIATION SAFETY REGULATION FOR STANDARD AIRCRAFT.I

- a. Operating limitations must be designed to fit the specific situation encountered. The DGCA may impose any additional limitations deemed necessary in the interest of safety. The DGCA must review each imposed operating limitation with the applicant to ensure the applicant understands the operating limitations.
- b. Operating limitations for phase I flight testing to meet the requirements of CASR part 91 sec. 91.319(b) are not applied to those aircraft surrendering an LSA category certificate and applying for an experimental certification for the purpose of operating LSA when the aircraft has previously been flight tested and is in a condition for safe operation, and all information is documented in the aircraft's records. This exclusion from phase I flight testing does not apply to those transferals of aircraft airworthiness certification when the purpose is to incorporate a major change to the aircraft that would require compliance to CASR part 91 sec 91.319(b).
- c. Ultralight-like vehicles that do not meet CASR part 103 requirements and are transitioning into experimental purpose for operation of LSA may be used for compensation or hire for training and/or towing at the request of the applicant. The following operating limitations must be prescribed for the operation of experimental light-sport aircraft when certification has been conducted under the provisions CASR part 21 sec 21.191(h)(1), (2), or (3), and will be issued as shown below. Any deviation from the text must be coordinated in accordance with this Staff Instruction.
 - (1) No person may operate this aircraft for other than the purpose of meeting the requirements of CASR part 91 sec. 91.319(b) during phase I flight testing and, for the purpose of operating light-sport aircraft, after meeting these requirements as stated in the program letter (required by CASR part 21 sec. 21.193) for this aircraft. In addition, this aircraft must be operated in accordance with applicable air traffic and general operating rules of part 91 and all additional limitations herein prescribed under the provisions of CASR part 91 sec. 91.319(e). These operating limitations are a part of Form 21-24, must be carried in the aircraft at all times, and must be available to the pilot in command of the aircraft.
 - (2) This aircraft must display the word -experimental in accordance with CASR part 45 sec. 45.23(b).
 - (3) This aircraft does not meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. The owner/operator of this aircraft must obtain written permission from another CAA before operating this aircraft in or over that country. That written permission must be carried aboard the aircraft together with the airworthiness certificate.
 - (4) Application must be made to DGCA for any amendment to these operating limitations.
 - (5) During phase I flight testing to meet the requirements of CASR part 91 sec. 91.319(b), or as a result of the incorporation of a major change, all flights must be conducted within the assigned geographic area.
 - (a) The area must be described by radius, coordinates, and/or landmarks.

- (b) The designated area must be over open water or sparsely populated areas having light air traffic.
- (c) The size of the area must be adequate to safely conduct the anticipated maneuvers and tests.

NOTE: In the case of an airport surrounded by a densely populated area, paragraph 132b(1) of this Staff Instruction.

- (6) Flight testing required for phase I operations or as a result of the incorporation of a major change will be conducted in the assigned test area. Flight test operations will only be conducted under VFR day conditions, with the pilot as the sole occupant of the aircraft. This aircraft must be operated for at least _____ hours in the assigned geographic area. Following the satisfactory completion of the required number of flight hours in the flight test area, the pilot must certify in the aircraft records that the aircraft has been shown to comply with CASR part 91 sec.91.319(b) with a statement that includes the following information: "I certify that the prescribed flight test hours have been completed and the aircraft is controllable throughout its normal range of speeds and throughout all maneuvers to be executed, has no hazardous operating characteristics or design features, and is safe for operation. The flight test was completed under the following conditions: maximum operating weight, style/set of wing or sail, maximum demonstrated airspeed, and minimum demonstrated stall speed." All major changes or modifications will be listed in the aircraft records and the compliance statement will be restated with the changes listed. The aircraft may not be operated in excess of the weights and speeds demonstrated.

NOTE: An LSA-issued original experimental certificates or one issued as a result of the incorporation of a major change should be limited to operations within an assigned flight test area for a minimum of 5 hours for all classes of LSA.

- (7) Any change to the flight test area location or size must be submitted to DGCA.
- (8) Except for takeoffs and landings, this aircraft may not be operated over densely populated areas or in congested airways.
- (9) This aircraft is prohibited from operating in congested airways or over densely populated areas, unless directed by air traffic control, or unless sufficient altitude is maintained to effect a safe emergency landing in the event of a power unit failure, without hazard to persons or property on the ground.
- (10) This aircraft is to be operated under VFR day only.
- (11) After completion of phase I flight testing, unless appropriately equipped for night and/or instrument flight in accordance with CASR part 91 sec.91.205, this aircraft is to be operated under VFR day only.
- (12) No person may operate this aircraft for carrying persons or property for compensation or hire.

NOTE: This limitation must be issued to CASR part 21 sec.21.191(h)(1) aircraft when limitations (13) and (14) are not issued. This limitation must be issued for all aircraft certificated under CASR part 21 sec. 21.191(h)(2) and (3).

- (13) No person may operate this aircraft for compensation or hire, except this aircraft may be used for compensation or hire to conduct flight training in accordance with CASR part 91 sec.91.319(e).
- (14) No person may operate this aircraft for compensation or hire, except this aircraft may be used for compensation or hire to conduct towing of a light-sport glider or an unpowered ultralight vehicle in accordance with CASR part 91 sec.91.309.

NOTE: When operating limitations (13) and/or (14) are used in place of limitation (12), limitation (13) applies to flight training. Limitation (14) applies to towing, which has no expiration date.

- (15) The pilot in command of this aircraft must advise the passenger of the
- (16) experimental nature of this aircraft and that it does not meet the certification requirements of a standard certificated aircraft.
- (17) This aircraft must contain the placards and markings as required by CASR part 91 sec. 91.9. In addition, the placards and markings must be inspected for legibility and clarity, and the associated systems inspected for easy access and operation, to ensure they function in accordance with the manufacturer's specifications during each condition inspection.
- (18) This aircraft is prohibited from aerobatic flight, that is, an intentional maneuver involving an abrupt change in the aircraft's attitude, an abnormal attitude, or abnormal acceleration not necessary for normal flight.

NOTE: When the manufacturer states within the aircraft's operating instructions that the aircraft is capable of aerobatic flight, limitation (18) will be used instead of limitation (17).

- (19) This aircraft may conduct aerobatic flight in accordance with the provisions of CASR part 91 sec. 91.303. Aerobatics must not be attempted until sufficient flight experience has been gained to establish that the aircraft is satisfactorily controllable. The aircraft may only conduct those aerobatic flight maneuvers addressed in the aircraft's operating instructions and that have been satisfactorily accomplished during flight testing and recorded in the aircraft records. The aircraft may only conduct those aerobatic flight maneuvers that have been satisfactorily accomplished during flight testing and recorded in the aircraft maintenance records by use of the following, or a similarly worded, statement: "I certify that the following aerobatic maneuvers have been test flown, and that the aircraft is controllable throughout the maneuvers' normal range of speeds and is safe for operation. The flight-tested aerobatic maneuvers are _____ at _____, at _____, _____ at _____, and at _____."

NOTE: Aerobatic flights may be permitted in the assigned test area. The applicant should be advised that aerobatics or violent maneuvers should not be attempted until sufficient flight experience has been gained to establish that the aircraft is satisfactorily controllable. These operating limitations may be modified to include only those aerobatics/maneuvers that have been satisfactorily accomplished and recorded in the aircraft records during the flight test period. These aerobatic maneuvers should be permitted upon leaving the assigned test area. Appropriate limitations identifying the aerobatics/maneuvers and conditions under which they may be performed should be prescribed. The DGCA may witness aerobatic maneuvers if deemed necessary.

- (20) The pilot in command of this aircraft must hold at least:
- (i) A student pilot certificate with a _____ category, class, and _____ make/model privilege endorsement by an authorized instructor; or
 - (ii) A sport pilot certificate, with a _____ category, class, and _____ make/model privilege within that set of aircraft (reference CASR part 61 sec. 61.1(b)(14)); or
 - (iii) A recreational pilot certificate or higher with sport pilot privileges, with a _____ category, class, and _____ make/model privilege within that set of aircraft (reference CASR part 61 sec. 61.1(b)(14)); or
 - (iv) A recreational pilot certificate or higher.

NOTE: This limitation must be aircraft-specific. When the aircraft clearly fits a category or class, the DGCA Inspector or designee must list the category and class. When it is an aircraft for which a category and class has not been defined, select a category and class that has operating and handling characteristics that most closely resemble those of the aircraft.

- (21) This aircraft must not be used for banner towing operations or intentional parachute jumping.
- (22) The pilot in command of this aircraft must notify air traffic control of the experimental nature of this aircraft when operating into or out of airports with an operational control tower. When filing IFR, the experimental nature of this aircraft must be listed in the remarks section of the flight plan.
- (23) Aircraft instruments and equipment installed and used under CASR part 91 sec. 91.205 must be inspected and maintained in accordance with the requirements of CASR part 91. Any maintenance or inspection of this equipment must be recorded in the aircraft maintenance records.
- (24) No person may operate this aircraft unless within the preceding 12 calendar months it has had a condition inspection performed in accordance with the scope and detail to appendix D to CASR part 43, or other DGCA-approved programs, and was found to be in a condition for safe operation. As part of the condition inspection, cockpit instruments must be appropriately marked and needed placards installed in accordance with CASR part 91 sec. 91.9. In addition, system-essential controls must be in good

condition, securely mounted, clearly marked, and provide for ease of operation. This inspection will be recorded in the aircraft maintenance records.

- (25) No person may operate this aircraft to tow a light-sport glider or unpowered ultralight vehicle for compensation or hire or conduct flight training for compensation or hire in this aircraft unless within the preceding 100 hours of time in service the aircraft has been inspected by a certificated light-sport repairman with a maintenance rating, or an appropriately rated certificated mechanic, or an appropriately rated repair station in accordance with inspection procedures developed by the aircraft manufacturer or a person acceptable to the DGCA.
- (26) Condition inspections must be recorded in the aircraft maintenance records showing the following, or a similarly worded, statement: "I certify that this aircraft has been inspected on [insert date] in accordance with the scope and detail of appendix D to part 43 or the manufacturer's inspection procedures, and was found to be in a condition for safe operation."
- (27) The entry will include the aircraft's total time-in-service, and the name, signature, certificate number, and type of certificate held by the person performing the inspection.
- (28) An experimental LSA owner/operator as a repairman for this aircraft under CASR part 65 sec. 65.107 or an appropriately rated DGCA-certificated mechanic may perform the condition inspection required by these operating limitations.

4085-4095. RESERVED.

SECTION 9 EXPERIMENTAL AMATEUR-BUILT AIRCRAFT AIRWORTHINESS CERTIFICATION

4096. GENERAL.

Under the provisions of CASR part 21 sec. 21.191(g), an amateur-built aircraft is defined as an aircraft in which the major portion have been fabricated and assembled by persons who undertook the construction project solely for their own education or recreation.

- a. Amateur-built aircraft may be constructed from—
 - (1) An amateur builder's original design, or
 - (2) Purchased plans.
- b. The kits must be evaluated by the DGCA. Kit evaluations determine whether aircraft fabricated and assembled by an amateur builder from an evaluated kit may meet the major portion requirement of CASR part 21 sec. 21.191(g) and be eligible for an experimental amateur- built airworthiness certificate.

4097. ELIGIBILITY.

- a. Basic Guidelines. Amateur-built Aircraft may be eligible for a special airworthiness certificate in the experimental category, for the purpose of operating amateur-built aircraft when:
 - (1) The applicant (individual or group) presents satisfactory evidence that the major portion of the aircraft was fabricated and assembled.
 - (2) The project having been undertaken for educational or recreational purposes,
 - (3) The DGCA finds that the aircraft complies with acceptable aeronautical standards and practices, and
 - (4) The aircraft is in condition for safe operation,

NOTE: Fabrication is defined as to perform work on any article such as layout, bending, countersinking, straightening, cutting, sewing, gluing/bonding, layup, forming, shaping, trimming, drilling, deburring, machining, applying protective coatings, surface preparation and priming, riveting, welding or heat treating, and transforming the article toward or into its finished state.

- b. Statement of Eligibility. The applicant must submit a notarized DAAO Form No. 21-12, Eligibility Statement, Amateur-Built Aircraft, certifying the major portion was fabricated and assembled for educational or recreational purposes.
 - (1) The form specifies that an amateur builder identify if commercial assistance was used in the construction of the aircraft and identify the source of the assistance.
 - (2) Evidence and records must be available to support these statements and provided to the DGCA.
- c. Additional Information and Demonstrating Level of Knowledge. To determine level of knowledge, the DGCA may ask the applicant to

provide information during the airworthiness inspection. For example, the DGCA could ask the applicant to describe a particular construction task or technique used to fabricate the aircraft or provide information as to the type of materials. These discussions enable the DGCA to evaluate the involvement of the applicant in the construction of the aircraft. Since each case must be treated individually, specific standards cannot be developed to guide the DGCA inspector in determining exactly when an aircraft is, or is not, amateur built. The inspector must use good judgment in each specific case to be satisfied that the major portion of the aircraft (excluding the procured items) was fabricated and assembled by an individual, or group of individuals for recreational or educational purposes.

- d. Prototype Aircraft Produced by an Amateur-Built Aircraft Kit Manufacturer. In some cases, prototype aircraft originally certificated under market survey/crew training were used to prove their design for amateur-built purposes. However, such aircraft are considered to be produced as a furtherance of a business, in that their design is intended to be sold as plans and/or kits, and therefore are not eligible for amateur-built aircraft status.
- (1) These prototype aircraft are not produced by persons -solely for their own education or recreation, and therefore are not eligible for an experimental airworthiness certificate under CASR part 21 sec. 21.191(g).
 - (2) Following termination of their use in the business development activity, such prototype aircraft may be eligible for an experimental certificate for another purpose(s).
 - (3) In those instances where an aircraft is constructed at a manufacturing facility by employees or principals of that company, the applicant must demonstrate to the DGCA that the aircraft was not produced to be used in the furtherance of the business activities of that company.
 - (4) Kit aircraft manufactured and assembled by a business, as either a prototype or for sale to other persons, are not considered amateur-built and do not meet the education or recreation requirements of CASR part 21 sec. 21.191(g). Applications for such aircraft will not be accepted.
- e. Records. If records are not available to support the eligibility statement, DAAO Form No. 21-12, the DGCA will not be able to find compliance to the education, recreation, and major portion requirements of CASR part 21 sec. 21.191(g).

4098. DETERMINATION OF THE MAJOR PORTION.

The determination of the major portion factor may be made by evaluation of the amount of work accomplished by the individual or group of individual or group of individuals as against the total amount of work necessary or the complete project (excluding standard procured items). In any event the "major portion" of the aircraft is considered to mean more than 50 percent of the fabrication and more than 50 percent of the assembly. The applicant will submit Eligibility Statement - Amateur-Built Aircraft DAAO Form No. 21-42, certifying that the major portion of the aircraft was fabricated and assembled for education and/or recreation and that the applicant has evidence to support the statement. The evidence may be requested by the DGCA inspector for review.

4099. DESIGN AND CONSTRUCTION.

The DGCA should be reasonable in its requests for design data from amateur builders, keeping in mind that in most instances only one aircraft is involved. Accordingly, the amateur builder(s) are not required to have the detailed design data, quality systems, and procedures that holders of type and production certificates are required to have for the serial production of duplicate aircraft. Often, the amateur builder will only have the information provided with the kit. However, the amateur builder should be strongly encouraged to maintain the documentation and to substantiate the fabrication and assembly process and show compliance with CASR part 21 sec. 21.191(g).

- a. Use of Commercially Produced Products and Articles. To meet the intent of CASR part 21 sec. 21.191 and 21.193 and to be eligible for an experimental certificate, satisfactory evidence must be presented to show that the aircraft was not built from completely prefabricated products, articles or kits.
 - (1) The DGCA recognizes that amateur builders cannot be expected to have fabricated every product and article that makes up the aircraft and that some products and articles will be acquired from commercial sources.
 - (2) Items such as engines, engine accessories, propellers, rotor blades, rotor hubs, tires, wheel and brake assemblies, instruments, and standard aircraft hardware, including pulleys, bell cranks, rod ends, bearings, bolts, rivets, hot air balloon burners, and fuel tanks, are acceptable and may be procured on the open market. The use of these products and articles are not counted against the amateur builder or kit manufacturer when the DGCA determines whether the amateur-built aircraft has met the major portion requirement.

- b. Use of Salvaged Articles from Type-Certificated Aircraft. The use of used or salvaged articles (for example, landing gear, horizontal stabilizer, and engine mount) from type-certificated aircraft is permitted, as long as they are in a condition for safe operation, however:
 - (1) When a project involves a major article, such as wings, fuselage, or tail assembly, contact DGCA for a determination of eligibility to CASR part 21 sec. 21.191(g).
 - (2) No credit will be given to the amateur builder(s) for any work on these salvaged articles when determining whether the amateur-built aircraft has met the major portion requirement. This would include any "rebuilding" or "restoring" activities to return these articles to an airworthy condition.
 - (3) All fabrication, installation, and assembly tasks accomplished with used or salvaged articles will be credited to the "Mfr Kit/Part/Component" column on the Amateur-Built Aircraft Fabrication and Assembly Checklist. However, assembly credit may given in those cases where used or salvaged articles are mated to portions of the aircraft fabricated and assembled by the amateur builder.
 - (4) Amateur builders should be made aware that excessive use of prefabricated or salvaged articles when building their aircraft may render the aircraft ineligible for amateur-built status as

defined in CASR part 21 sec. 21.191(g). The use of a significantly complete airframe or combination of major articles such as wings and fuselage, tail plane assembly from a type-certificated aircraft, or a compilation of aircraft, would most likely render the aircraft ineligible for amateur-built status as defined in CASR part 21 sec. 21.191(g).

- (5) As soon as it is known that a project involves the use of a complete airframe or combination of major articles such as wings, fuselage, or tail assembly, contact DGCA for additional guidance.
- c. Type-Certificated Aircraft. Alterations, rebuilding, and repairs to a type-certificated aircraft or article will be categorized as falling under CASR Part 43. The amateur builder will receive no credit for these actions toward fabrication or assembly.

Note: The practice of performing alterations, repairs, and rebuilding on previously type-certificated aircraft for the purpose of obtaining an experimental amateur-built airworthiness certificate is not authorized under CASR 21.191(g). Such maintenance actions properly fall under CASR Part 43. Applications for airworthiness inspections on such aircraft will not be accepted. (See paragraphs 4099b through d.)

Use the normal STC process for modifications to these aircraft. They need to be kept under their existing maintenance programs to ensure continued airworthiness.

d. Use of Amateur-Built Kits.

- (1) An aircraft fabricated and assembled from a kit may be eligible for amateur-built certification, provided the major portion of the aircraft has been fabricated and assembled by the amateur builder(s) solely for their own education or recreation. The applicant must have satisfactory evidence to support the major portion (greater than 50 percent) requirement and the education/recreation statement on DAAO Form No. 21-12. This evidence is typically in the form of a builder's log or equivalent, and includes photographs that document the multitude of steps included in each of the listed tasks in the Amateur-Built Aircraft Fabrication and Assembly Checklist. In addition, such documentation needs to include materials and techniques used, construction dates, locations, and detailed. If the builder's log or equivalent does not provide sufficient detail, the DGCA may not be able to find compliance with CASR part 21 sec. 21.191(g).
- (2) All fabrication or assembly tasks contracted to another party (that is, for compensation or hire) or provided by a commercial assistance center, when added to the manufacturer's total credits, must be less than the major portion of the construction project. An aircraft assembled from a kit composed entirely of completely finished prefabricated articles is not eligible for an experimental amateur-built airworthiness certificate.
- (3) The major portion of a kit should be composed of raw stock, such as lengths of wood, tubing, and extrusions, which may have been cut to an approximate length. A certain quantity of prefabricated articles, such as heat-treated ribs, bulkheads, or

complex articles made from sheet metal, fiberglass, composites, or polystyrene would also be acceptable, however—

- (i) The kit must still allow an amateur builder to meet the major portion requirement, and the applicant must show to the satisfaction of the DGCA that the completion of the aircraft was not simply an assembly operation.
 - (ii) Caution is recommended for kits that provide large articles, such as complete fuselages and wing structures requiring minimal supplemental fabrication and assembly.
- (4) Some kits may include aircraft-specific jigs, assembly tools and fixtures, templates, raw stock, or other means to simplify the fabrication and assembly process. If an amateur builder uses such items, the DGCA will determine whether the amateur builder will still fabricate and assemble the major portion of the aircraft and advise the amateur builder accordingly.
 - (5) Amateur builders should obtain a copy of the completed kit evaluation from their respective kit manufacturer if available. The completed evaluation will enable the amateur builder to determine how much fabrication and assembly remains to be completed by the amateur builder, and if any percentage of that work could be performed using commercial assistance.

4100. KIT EVALUATION.

The DGCA performs kit evaluations to determine if an aircraft constructed from a prefabricated kit, following the manufacturer's instructions, may meet the major portion requirement of CASR part 21 sec. 21.191(g). The kit evaluation program is being held in abeyance until DGCA has completed a reassessment of the program. DGCA will continue to certificate kit aircraft. Each application will be handled on a case-by-case basis as to whether the kit aircraft meets the major portion criteria.

4101. ADVISING APPLICANTS.

- a. The DGCA inspection of an amateur-built aircraft will be limited to a general airworthiness inspection when the aircraft is submitted for airworthiness certification. The DGCA will not perform any progressive inspections during the construction of the aircraft. These in-process inspections should be conducted by knowledgeable persons, for example, certificated mechanics. In the areas of engineering design, the builder should, if necessary, obtain the services of a qualified aeronautical engineer or consult the seller of purchased plans. All advice given to the builder should be made a matter of record for future reference if necessary. IN NO INSTANCE, WILL THE INSPECTOR ACTUALLY PERFORM ANY OF THE WORK.
- b. When the prospective builder contacts the DGCA to advise the DGCA of the construction project, the DGCA should provide the administrative requirements and guidance to ensure a thorough understanding of applicable regulations.
- c. The prospective builder, when applying for an airworthiness certificate, should submit to the DGCA a three-view sketch, drawing,

- or photograph of the proposed aircraft project and a tentative completion date.
- d. The applicant should be advised that to show compliance with CASR part 91 sec. 91.319(b), the applicant must develop a flight test program that addresses the requirements, goals, and objectives of each test flight.. Flight test programs accomplish two purposes. First, they ensure that the aircraft has been adequately tested and determined to be safe to fly within the aircraft's flight envelope. Second, the flight test data is used to develop an accurate and complete aircraft flight manual and to establish emergency procedures.
 - e. The DGCA, when requested, should furnish the builder with the following forms:
 - (1) Application for aircraft registration, DAAO Form No. 47-11.
 - (2) Application for airworthiness certificate (DAAO Form No. 21-21).
 - (3) Eligibility Statement - Amateur Built Aircraft, DAAO Form No. 21-12.
 - (4) Affidavit of Ownership for Amateur-Built Aircraft
 - f. Proper Documentation. Amateur builder(s) need to be able to provide adequate and sufficient documentation to detail the construction and inspections of their aircraft.
 - (1) These records need to clearly indicate what was fabricated, assembled, or inspected, by whom, and the date the activity was performed.
 - (2) Documentation should clearly show who performed the task(s), describe when and where the tasks were performed, depict the methods of acceptable aeronautical construction and practices, and document the use of commercial and noncommercial assistance.
 - (3) This documentation may include the following:
 - (i) The Amateur-Built Aircraft Fabrication and Assembly Checklist
 - (ii) Comprehensive builder's logs in any format, to include photographs of all the steps included in each of the listed tasks in the Amateur-Builder Aircraft Fabrication and Assembly Checklist, materials and techniques used in construction, as well as dates, locations, and detailed descriptions.
 - (iii) Photographs/video/DVD.
 - (iv) Drawings and engineering specifications.
 - (v) Kit manufacturer's data, when necessary.
 - (vi) Relevant documentation (for example, plans) and references (for example, handbooks) used.
 - (vii) Documentation concerning any commercial assistance used, including receipts.
 - (viii) Documentation concerning any non-commercial assistance used.
 - (ix) Article inventories and histories.
 - (x) Receipts and catalogs.
 - (xi) Logbook entries.
 - g. At the time of airworthiness certification:
 - (1) The aircraft should be complete in every respect, and

- (2) The applicant must submit all required documentation. If the applicant cannot, or will not provide a statement of eligibility, the applicant should be advised that the aircraft cannot be certificated as amateur built until other satisfactory evidence is provided to substantiate that the major portion of the aircraft was built for education or recreation.
- h. Showing Compliance to CASR part 91 sec. 91.319(b). The applicant should be advised that after the experimental amateur-built airworthiness certificate has been issued, they must show compliance to CASR part 91 sec. 91.319(b). This is done by developing a flight test program that addresses the requirements, goals, and objectives of each test flight. The flight test program should be developed in accordance with AC 90-89, Amateur-Built Aircraft and Ultralight Flight Testing Handbook, or its equivalent in scope and detail. Flight test programs serve two purposes:
 - (1) They ensure the aircraft has been adequately tested and determined to be safe to fly within the aircraft's flight envelope.
 - (2) The flight test data is used to develop an accurate and complete aircraft flight manual and to establish emergency procedures.
 - i. Weight and Balance. Prior to the first flight, the amateur, builder should weigh the aircraft in accordance with established weight and balance procedures to determine the aircraft's empty, gross, and most the most forward and aft center of gravity limits. Such limits would be determined by the builder through calculations if the aircraft is self-designed, or specified in the data if the aircraft is a "common" design built from purchased plans. The weight and balance report, including load limits for crew oil, fuel, and baggage, should be available in the aircraft along with the other applicable placards, listings, and markings required by CASR part 91 sec. 91.31. The DGCA should determine that, prior to the first flight of the aircraft, the center of gravity limits have been established, the aircraft weighed to determine the most fore and aft locations, and that loading is within the calculated limits.

4102. CERTIFICATION PROCEDURE.

- a. General. The DGCA airworthiness certification will consist of a general airworthiness inspection of the aircraft which will be accomplished after the aircraft is complete and prior to the issuance of an airworthiness certificate. During this airworthiness inspection, the DGCA inspector should not request extensive disassembly of the aircraft if the builder can provide documented results of in-process inspections. These in-process inspections should be conducted by knowledgeable persons (i.e., certificated mechanics, etc.). The record should indicate what was inspected, by whom, and the date of the inspection. In addition, builders should document construction using photographs taken at appropriate times prior to covering or finishing. The photographs should clearly show methods of construction and quality of workmanship. Such photographic record is should be included with the builder's log or other construction records. The only time extensive disassembly should be requested is when there is question of safety that would endanger the general public. When an aircraft fabricated from a kit is identified as meeting the major portion rule by the DGCA, the DGCA will review the applicant's

documentation supplied with the kit to verify it agrees with the identification and description given in the DGCA listing of eligible amateur-built kits. Deviations from the DGCA-identified kit configuration will require the inspector to make an independent determination that the applicant fabricated and assembled the major portion of the aircraft.

- b. Record Inspection and Document Review. The DGCA must:
- (1) Obtain from the applicant a properly executed DAAO Form No. 21-21 and any other documents required for the certification.
 - (2) Obtain from the applicant a program letter identifying the aircraft, the purpose of the certificate, the area over which the operations are to be conducted, and the duration of the program.
 - (3) Review the documentation provided by the applicant to determine that the registration requirements of CASR part 47 have been met, and ensure the aircraft is marked in accordance with CASR part 45.
 - (4) Review the aircraft records to determine whether any required maintenance, inspections, etc., have been accomplished. Records must be complete.
 - (5) Review the applicant's weight and balance data for accuracy and currency for the aircraft submitted.
 - (6) Ensure there is a signed and dated statement from the owner in the aircraft records that the aircraft has had an inspection performed in accordance with appendix D to CASR part 43, or other approved programs, and was found to be in a condition for safe operation. This statement will support the owner's inspection and airworthiness statement on block III of the Application for Airworthiness Certificate. The inspection described above will help reduce errors made during construction of the aircraft.

NOTE: There is NO requirement for airframe and powerplant mechanics to sign off on amateur-built airworthiness inspections. The aircraft builder's signature on DAAO Form No. 21-21, block III, attests to the airworthiness of the amateur-built aircraft.

- c. Aircraft Inspection. The DGCA must arrange with the applicant to make the aircraft available for inspection to determine the following:
- (1) The ID plate meets the requirements of CASR part 45 sec. 45.11, as applicable.
 - (2) The information on the ID plate is correct, matches the information on Form 21-21, and is in accordance with CASR part 45 sec. 45.13, as applicable.
 - (3) The aircraft nationality and registration marks are in accordance with part CASR 45 sec. 45.23, 45.27, and 45.29.
 - (4) The flight control systems and associated instruments as equipped operate properly and are appropriate for each of the six classes of LSA.
 - (5) The cockpit instruments are appropriately marked, and needed placards are installed and placed for easy reference.
 - (6) System controls (for example, fuel selector(s) and electrical switches/breakers) are appropriately placed, clearly marked, provide easy access and operation, and function in accordance

with the manufacturer's specifications and applicable consensus standard.

- (7) An ELT is installed, when required (CASR part 91 sec. 91.207).
- d. Certificate Issuance. Upon satisfactory completion of the airworthiness inspection and documentation review, the DGCA will issue a Special Airworthiness Certificate, DAAO Form No. 21-24, for the aircraft. This Special Airworthiness Certificate will include the operating limitations that will specify the operating parameters.
- (1) If the aircraft meets the requirements for the certification, the DGCA must:
- (i) Make an aircraft logbook entry.
 - (ii) Issue Form 21-24 with appropriate operating limitations.
 - (iii) Complete sections V and VIII of Form 21-21,
 - (iv) Examine, review, and route the certification file in accordance with the instructions contained in chapter 8 of this Staff Instruction.
- (2) If the aircraft does not meet the requirements for the certification requested and the airworthiness certificate is denied, the DGCA must:
- (i) Write a letter to the applicant stating the reason(s) for denying the airworthiness certificate.
 - (ii) Attach a copy of the denial letter to Form 21-21 to be made part of the aircraft record.
- e. Transfer of Airworthiness Certificate. An airworthiness certificate is transferred with the aircraft (CASR part 21 sec.21.179); e.g., change of ownership, transfer of registration, etc. There is no DGCA inspection required as a result of a transfer of an aircraft with its airworthiness certificate unless it is determined that revised operating limitations are necessary. In this case, a new Special Airworthiness Certificate, DAAO Form No. 21-24 must be issued to reflect the new date of the revised operating limitations. Therefore, an Application for Airworthiness Certificate, DAAO Form No. 21-21, is required to be submitted by the applicant.
- f. Expired or Foreign Airworthiness Certificates. In some cases, amateur-built aircraft may be sold with an expired airworthiness certificate that may be due to the expiration of the operating limitations. In such cases, an applicant may request and receive an experimental airworthiness certificate for the purpose of operating amateur-built aircraft, only if the aircraft previously was certificated in this category. In this case, a new Application for Airworthiness, Form 21-21, is required before an airworthiness certificate can be issued along with operating limitations.

4103. FLIGHT TEST AREAS

- a. General. CASR part 91 sec. 91.319(b) requires that an unproven aircraft be assigned to a flight test area. The assigned test area is prescribed in accordance with CASR part 91 sec.91.305. The DGCA, when requested, should assist applicants in selecting areas that comply with CASR part 91 sec. 91.305. The DGCA is required to evaluate each application to determine that the flight test area does not exceed what is reasonably required to accomplish the program.

Actions pertaining to flight test areas must be coordinated with the nearest office of the Air Traffic Service.

- b. Assigned Flight Test Area. The procedures outlined under paragraph 443 are applicable to amateur-built aircraft. Although the period of assignment is not established by regulation, the following times are suggested as guidelines when issuing original airworthiness certificates.
 - (1) Amateur-built airplanes and helicopters (rotorcraft) applying for original airworthiness certification should be limited to operation within an assigned flight test area for at least 25 hours when a type certificated engine and propeller combination is installed, or 40 hours when an uncertificated engine and propeller combination is used.
 - (2) "Amateur built gliders, balloons and dirigibles (and ultralight aircraft built from kits evaluated by the DGCA and found eligible to meet the requirements of CASR part 21 sec 21.191(g) and which meet the criteria for ultralight vehicles in CASR Part 103) applying for original airworthiness certification should be limited to operating within an assigned flight test area for least 10 hours, which should include a minimum of five takeoffs and landings."
 - (3) The period an amateur-built aircraft is assigned to a flight test area following any major changes in the aircraft is at the discretion of the DGCA inspector.
- c. Operation Outside Flight Test Area. During operation outside the flight test area, the following placard shall be displayed in the cockpit in full view of all occupants in addition to the requirements of CASR part 91 sec 91.31.
- d. NOTE: PASSENGER WARNING - THIS AIRCRAFT IS AMATEUR-BUILT AND DOES NOT COMPLY WITH CIVIL AVIATION SAFETY REGULATIONS FOR STANDARD AIRCRAFT.
(This placard is not necessary for single place aircraft).

4104. ISSUANCE OF EXPERIMENTAL AMATEUR-BUILT OPERATING LIMITATIONS

- a. Operating limitations must be designed to fit the specific situation encountered. The DGCA may impose any additional limitations deemed necessary in the interest of safety. The DGCA must review each imposed operating limitation with the applicant to ensure that the operating limitations are understood by the applicant.
- b. The following operating limitations shall be prescribed to experimental amateur-built aircraft:
 - (1) No person may operate this aircraft for other than the purpose of meeting the requirements of CASR part 91 sec. 91.319(b) during flight testing, and for recreation and education after meeting these requirements as stated in the program letter (required by sec. 21.193) for this aircraft. In addition, this aircraft must be operated in accordance with applicable air traffic and general operating rules of CASR part 91 and all additional limitations herein prescribed under the provisions of CASR part 91 sec. 91.319(i). These operating limitations are a

part of DAAO Form No. 21-24, and are to be carried in the aircraft at all times and be available to the pilot in command of the aircraft.

- (2) During phase I flight testing to meet the requirements of CASR part 91 sec. 91.319(b), all flights must be conducted within the geographical area described as follows:
- (i) The area must be described by radius, coordinates, and/or landmarks.
 - (ii) The designated area must be over open water or sparsely populated areas having light air traffic.
 - (iii) The size of the area must be that required to safely conduct anticipated maneuvers and tests, as appropriate.

NOTE: In the case of an airport surrounded by a densely populated area, refer to paragraph 132b(1) of this Staff Instruction.

- (3) This aircraft must be operated for at least hours in the assigned geographic area.

NOTE: The DGCA requires a minimum of 25 hours of flight testing for an aircraft with a type-certificated engine and propeller combination installed. A minimum of 40 hours is required when a non-type-certificated engine, propeller, or engine/propeller combination is installed. DGCA may assign longer test hours when it is necessary to determine compliance with CASR part 91 sec. 91.319(b).

- (4) All test flights, at a minimum, must be conducted under VFR, day only. Following satisfactory completion of the required number of flight hours in the flight test area, the pilot must certify in the records that the aircraft has been shown to comply with CASR part 91 sec. 91.319(b). Compliance with sec. 91.319(b) must be recorded in the aircraft records with the following, or a similarly worded, statement: "I certify that the prescribed flight test hours have been completed and the aircraft is controllable throughout its normal range of speeds and throughout all maneuvers to be executed, has no hazardous operating characteristics or design features, and is safe for operation. The following aircraft operating data has been demonstrated during the flight testing: speeds V_{so} _____, and V_x _____, and V_y _____, and the weight and CG location _____ at which they were obtained."

- (5) Except for takeoffs and landings, this aircraft may not be operated over densely populated areas or in congested airways.

NOTE: This limitation should be issued in accordance with paragraphs 132b(1) and (2) of this Staff Instruction.

- (6) This aircraft is prohibited from operating in congested airways or over densely populated areas unless directed by air traffic control, or unless sufficient altitude is maintained to effect a safe emergency landing in the event of a power unit failure, without hazard to persons or property on the ground.
- (7) This aircraft is to be operated under VFR, day only.

- (8) Aircraft instruments and equipment installed and used under CASR part 91 sec. 91.205 must be inspected and maintained in accordance with the requirements of CASR part 91. Any maintenance or inspection of this equipment must be recorded in the aircraft maintenance records.
- (9) During the flight testing phase, no person may be carried in this aircraft during flight unless that person is essential to the purpose of the flight.
- (10) No person may operate this aircraft for carrying persons or property for compensation or hire.
- (11) The pilot in command of this aircraft must advise each passenger of the experimental nature of this aircraft, and explain that it does not meet the certification requirements of a standard certificated aircraft.
- (12) This aircraft must contain the placards, markings, etc., as required by CASR part 91 sec. 91.9. In addition, the placards and markings must be inspected for legibility and clarity, and the associated systems inspected for easy access and operation, to ensure they function as intended by the builder/owner during each condition inspection.
- (13) This aircraft must display the word "EXPERIMENTAL" in accordance with CASR part 45 sec. 45.23(b).
- (14) This aircraft is prohibited from aerobatic flight, that is, an intentional maneuver involving an abrupt change in the aircraft's attitude, an abnormal attitude, or abnormal acceleration not necessary for normal flight

NOTE: If the builder states that the aircraft is capable of aerobatic flight, limitation 15 will be used in lieu of limitation 14.

- (15) This aircraft may conduct aerobatic flight in accordance with the provisions of CASR part 91 sec. 91.303. Aerobatics must not be attempted until sufficient flight experience has been gained to establish that the aircraft is satisfactorily controllable and in compliance with CASR part 91 sec. 91.319(b). The aircraft may only conduct those aerobatic flight maneuvers that have been satisfactorily accomplished during flight testing and recorded in the aircraft maintenance records by use of the following, or a similarly worded, statement: "I certify that the following aerobatic maneuvers have been test flown and that the aircraft is controllable throughout the maneuvers' normal range of speeds, and is safe for operation. The flight-tested aerobatic maneuvers are _____, _____, _____, and _____."

NOTE: Aerobatic flights may be permitted in the assigned test area. The applicant should be advised that aerobatics or violent maneuvers should not be attempted until sufficient flight experience has been gained to establish that the aircraft is satisfactorily controllable. These operating limitations may be modified to include only those aerobatics/maneuvers that have been satisfactorily accomplished and recorded in the aircraft records during the flight test period. These aerobatic maneuvers should be permitted upon leaving the assigned test area. Appropriate limitations identifying the aerobatics/maneuvers

and conditions under which they may be performed should be prescribed. The DGCA may witness aerobatic maneuvers if deemed necessary.

- (16) The pilot in command of this aircraft must hold an appropriate category/class rating in accordance with CASR part 61, or a letter of authorization issued by DGCA.
- (17) After incorporating a major change as described in CASR part 21 sec. 21.93, the aircraft owner is required to reestablish compliance with CASR part 91 sec. 91.319(b). If the major change includes installing a different type of engine (reciprocating to turbine) or a change of a fixed-pitch from or to a controllable propeller, the aircraft owner must fill out a revised DAAO Form No. 21-21 to update the aircraft's file in the DGCA Aircraft Registry. All operations must be conducted under day VFR conditions in a sparsely populated area. The aircraft must remain in flight test for a minimum of 5 hours. The FSDO may require additional time (more than 5 hours) depending on the extent of the modification. Persons nonessential to the flight must not be carried. The aircraft owner must make a detailed logbook entry describing the change before the test flight. Following satisfactory completion of the required number of flight hours in the flight test area, the pilot must certify in the records that the aircraft has been shown to comply with part 91 sec. 91.319(b). Compliance with part 91 sec. 91.319(b) must be recorded in the aircraft records with the following, or a similarly worded, statement: "I certify that the prescribed flight test hours have been completed and the aircraft is controllable throughout its normal range of speeds and throughout all maneuvers to be executed, has no hazardous characteristics or design features, and is safe for operation. The following aircraft operating data has been demonstrated during the flight testing: speeds V_{so} , V_x , and V_y , and the weight , and CG location at which they were obtained."
- (18) This aircraft must not be used for glider towing, banner towing, or intentional parachute jumping.
- (19) This aircraft does not meet the requirements of the applicable, comprehensive, and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. The owner/operator of this aircraft must obtain written permission from another CAA prior to operating this aircraft in or over that country.
- (20) No person must operate this aircraft unless within the preceding 12 calendar months it has had a condition inspection performed in accordance with the scope and detail of appendix D to CASR part 43, or other DGCA-approved programs, and was found to be in a condition for safe operation. As part of the condition inspection, cockpit instruments must be appropriately marked and needed placards installed in accordance with 91.9. In addition, system-essential controls must be in good condition, securely mounted, clearly marked, and provide for ease of operation. This inspection will be recorded in the aircraft maintenance records.
- (21) Condition inspections must be recorded in the aircraft maintenance records showing the following, or a similarly

worded, statement: “I certify that this aircraft has been inspected on [insert date] in accordance with the scope and detail of appendix D to CASR part 43, and was found to be in a condition for safe operation.” The entry will include the aircraft’s total time-in-service, and the name, signature, certificate number, and type of certificate held by the person performing the inspection.

NOTE: Limitations 22 and 23 will be issued in lieu of limitations 20 and 21 for turbine-powered amateur-built aircraft.

- (22) This aircraft must not be operated unless it is inspected and maintained in accordance with an inspection program selected, established, identified, and used as set forth in CASR part 91 sec. 91.409(e), (f), (g), and (h). This inspection must be recorded in the aircraft maintenance records.
- (23) Inspections must be recorded in the aircraft maintenance records showing the following, or a similarly worded, statement: —I certify that this aircraft has been inspected on [insert date] in accordance with the scope and detail of the [identify program, title] and found to be in a condition for safe operation.□ The entry will include the aircraft’s total time-in-service (cycles if appropriate), and the name, signature, certificate number, and type of certificate held by the person performing the inspection.
- (24) An experimental aircraft builder certificated as a repairman for this aircraft under CASR part 65 sec. 65.104 or an appropriately rated DGCA-certificated mechanic may perform the condition inspection required by these operating limitations.
- (25) Application must be made to DGCA for any revision to these operating limitations.
- (26) The pilot in command of this aircraft must notify air traffic control of the experimental nature of this aircraft when operating into or out of airports with an operational control tower. When filing instrument flight rules (IFR), the experimental nature of this aircraft must be listed in the remarks section of the flight plan.

4105-4106. RESERVED.

SECTION 10. CERTIFICATION AND OPERATION OF AIRCRAFT UNDER THE
EXPERIMENTAL PURPOSE(S) OF EXHIBITION AND AIR RACING

4107. GENERAL.

Under the provisions of CASR part 91 sec. 21.191(d), exhibition aircraft are defined as aircraft that exhibit the aircraft's flight capabilities, performance, or unusual characteristics at airshows, for motion picture, television, and similar productions, and for the maintenance of exhibition flight proficiency, including (for persons exhibiting aircraft) flying to and from such airshows and productions. Under the provisions of CASR part 21 sec.21.191(e), air racing aircraft are defined as aircraft that participate in air races, including (for such participants) practicing for such air races and flying to and from racing events.

- a. Exhibition. Operating an aircraft to demonstrate its flight characteristics or capabilities in connection with sales promotions for the aircraft is not considered to be an eligible operational purpose under the exhibition category. A certificate for experimental exhibition must only be issued when an aircraft is to be used for valid exhibition purposes. Included in those purposes are organized airshows, organized air races, organized fly-in activities, organized exhibitions, youth education events, shopping mall/school/similar static displays, organized aerobatic competition, sail plane fly-ins or competitive races or meets, and movie or television productions. The duration of an airworthiness certificate for exhibition is one year.
- b. Air Racing. A certificate for experimental air racing must only be issued when an aircraft is to be used for valid air racing purposes, including organized air races or sail plane competitive events. The duration of an airworthiness certificate for air racing is one year.

4108-4010. RESERVED

4111.SPECIAL CERTIFICATION REQUIREMENTS.

The following provides information and guidance concerning airworthiness certification for experimental aircraft for the purpose(s) of exhibition and/or air racing.

- a. Records Inspection. In addition to the record inspection requirements of paragraph 4002a of this Staff Instruction, the DGCA must:
 - (1) Obtain from the applicant a program letter in accordance with CASR part 21 sec. 21.193(a), setting forth the purpose(s) for which the aircraft will be used. The program letter must be specific as to the intended use under the purpose requested, including names, dates, and locations of airshows, air races, or exhibition activities that will be attended. In the case of a movie or television production, the date(s) and location(s) of these productions must be provided. Applicants should be advised that the program letter is subject to review by the DGCA and that the owner/operator must notify the DGCA by letter or fax of any amendments to the proposed schedule prior to that flight.

- (2) Ensure that the applicant has written in or translated into the English language all of the necessary maintenance, inspection, operating, and flight manual(s) required to safely operate the aircraft.
- (3) Verify that maintenance records reflect records of inspections, overhauls, repairs, time- in-service on life-limited parts and engines, etc., and that all records are current.

NOTE: The requirements in CASR part 21 sec. 91.409(e) are applicable via an operating limitation issued at the time of airworthiness certification for all TPA, regardless of weight. One of the requirements provides for the replacement of life- limited parts at a time specified in documents approved by the Administrator.

- (4) Verify that the appropriately rated DGCA-certificated mechanic has made an entry in the aircraft records documenting the applicable inspections within 30 days prior to submitting DAAO Form No. 21-21.
- b. Aircraft Inspection. The DGCA will perform an inspection to the extent necessary to ensure that a prior inspection of the aircraft and aircraft systems has been accomplished in accordance with the inspection requirements as identified in paragraph 402 of this Staff Instruction. The DGCA will verify that instruments, instrument markings, and placards are as required by the CASR and are identified in the bilingual language.

4112. CERTIFICATION PROCEDURES.

- a. Once it has been determined that the aircraft meets the requirements for the airworthiness certification requested, the DGCA must:
 - (1) Make an aircraft record entry showing the following, or a similarly worded, statement: "I find this aircraft meets the requirements for a special airworthiness certificate for the purpose(s) of _____ [identify purpose(s)], and have issued a special airworthiness certified and operating limitations dated. The next inspection is due _____.
Signed: _____.
 - (2) Issue the airworthiness certificate and appropriate operating limitations in accordance with this Staff Instruction.
- b. If the aircraft does not meet the certification requirements and the airworthiness certificate is denied, the DGCA will provide a letter to the applicant stating the reason(s) for denial and, if feasible, identify which steps may be accomplished to meet the certification requirements. Should this occur, a copy of the denial letter will be attached to DAAO Form No. 21-21 and made a part of the aircraft's record.
- c. A DGCA inspector may elect to process the aircraft on a one-time certification basis, for example, via the issuance of only one special airworthiness certificate of unlimited duration. In these instances, when issuing the special airworthiness certificate for the purpose(s) of exhibition and/or air racing, the operating limitations will be prescribed in two phases in the same document.

4113. ISSUANCE OF EXPERIMENTAL EXHIBITION AND AIR RACING OPERATING LIMITATIONS.

- a. Operating limitations shall be designed to fit the specific situation encountered. The DGCA may impose any additional limitations deemed necessary in the interest of safety. The DGCA must review each imposed operating limitation with the applicant to ensure that the operating limitation are understood by the applicant.
- b. One or more of the following operation limitations, as applicable, must be prescribed:
 - (1) No person may operate this aircraft unless DAAO Form No. 21-24, Special Airworthiness Certificate is displayed at the cabin or cockpit entrance so that it is visible to passenger or flight crew.
 - (2) No person may operate this aircraft for other than the purpose of meeting the requirements of CASR part 91 sec. 91.319(b), as stated in the program letter (required by CASR part 91 sec. 21.193) for this aircraft. This aircraft must be operated in accordance with applicable air traffic and general operating rules of CASR part 91, as well as all additional limitations herein prescribed under the provisions of CASR part 91 sec. 91.319(e). These operating limitations are a part of the special airworthiness certificate, and are to be carried in the aircraft at all times and made available to the pilot in command of the aircraft.
 - (3) This aircraft may only operate from [identify name of outlying airport] until the requirements of CASR part 91 sec. 91.319(b) has been met. The operator will use the described corridor (shown on the attached chart) to transition to that airport. After meeting the requirements of CASR part 91 sec. 91.319(b), the aircraft may return to [enter home base airport name] and the established corridor will be used for all subsequent operations.
 - (4) In accordance with CASR part 47 sec. 47.45, the holder of a Certificate of Registration shall notify to DGCA for any change of the aircraft registrant address.
 - (5) This aircraft must be operated for at least 10 hours with at least takeoffs and landings (to a full stop), and all operations must be conducted in the geographic area described and/or shown on the attached chart.

NOTE: This geographical area must be over open water or sparsely populated areas having light air traffic. The size of the area must be that required to safely conduct the anticipated maneuvers and tests. The area must be described by radius, coordinates, and/or landmarks. The minimum number of hours and maximum number of takeoffs and landings should be based on the aircraft's condition and records, and the total time on the aircraft and its engine(s). To ensure national standardization, when issuing this limitation for TPA, the maximum number of hours normally should not exceed 10 and the minimum number of takeoffs and landings should be three.

- (6) Application must be made to the DGCA for any revision to these operating limitations.
- (7) This aircraft may not be operated over densely populated areas or in congested airways, except when otherwise directed by air traffic control.

- (8) This aircraft is to be operated under VFR, day only.
- (9) During the test flight phase, no person may be carried in this aircraft during flight unless that person is essential to the purpose of the flight.
- (10) No person may be carried in this aircraft during the exhibition of the aircraft's flight capabilities, performance, or unusual characteristics at airshows, or for motion picture, television, or similar productions, unless essential for the purpose of the flight. Passengers may be carried during flights to and from any event outlined in the program letter or during proficiency flying, limited to the design seating capacity of the aircraft.

NOTE: This limitation is applicable to the aircraft after it has satisfactorily completed all flight testing requirements and has the appropriate endorsement in the logbook.

- (11) The pilot in command of this aircraft must advise each passenger of the experimental nature of this aircraft, and explain that it does not meet the certification requirements of a standard certificated aircraft.
- (12) No person may operate this aircraft for carrying persons or property for compensation or hire.
- (13) Aerobatic maneuvers intended to be performed must be satisfactorily accomplished and recorded in the aircraft records during the flight test period.
- (14) This aircraft may not be operated unless the replacement times for life-limited parts specified in the applicable technical publications pertaining to the aircraft and its components are complied with. This aircraft, including its related components and systems, must be inspected in accordance with an approved inspection program selected under the provisions of CASR part 91 sec. 91.409(e). This inspection program must be recorded in the aircraft maintenance records.
- (15) Inspections must be recorded in the aircraft maintenance records showing the following, or a similarly worded, statement: "I certify that this aircraft has been inspected on [insert date] in accordance with the [identify program, title], and found to be in a condition for safe operation." The entry will include the aircraft's total time-in-service (cycles if appropriate), and the name, signature, certificate number, and type of certificate held by the person performing the inspection.
- (16) No person must operate this aircraft unless within the preceding 12 calendar months it has had a condition inspection performed in accordance with the scope and detail of appendix D to CASR part 43, or other DGCA-approved programs, and was found to be in a condition for safe operation. This inspection will be recorded in the aircraft maintenance records.
- (17) Only DGCA-certificated mechanics with appropriate ratings as authorized by CASR part 43 sec. 43.3 may perform inspections required by these operating limitations.
- (18) The DGCA must be notified, and its response received in writing, prior to flying this aircraft after incorporation of a major change as defined by CASR part 21 sec.21.93.
- (19) This aircraft must display the word "EXPERIMENTAL" in accordance with CASR part 45 sec.45.23(b).
- (20) This aircraft

must contain the placards, markings, etc., required by CASR part 91 sec. 91.9.

- (20) The pilot in command of this aircraft must hold an appropriate category/class rating. If required for the type of aircraft to be flown, the pilot in command also must hold either an appropriate type rating or a letter of authorization issued by a DGCA Flight Operations Inspector.
- (21) The pilot in command of this aircraft must notify air traffic control of the experimental nature of this aircraft when operating into or out of airports with operating control towers. The pilot in command must plan routing that will avoid densely populated areas and congested airways when operating VFR.
- (22) Following satisfactory completion of the required number of flight hours in the flight test area, the pilot must certify in the records that the aircraft has been shown to comply with CASR part 91 sec. 91.319(b). Compliance with sec. 91.319(b) must be recorded in the aircraft records with the following, or a similarly worded, statement: "I certify that the prescribed flight test hours have been completed and the aircraft is controllable throughout its normal range of speeds and throughout all maneuvers to be executed, has no hazardous operating characteristics or design features, and is safe for operation."
- (23) No person may operate this aircraft for other than the purpose(s) of [identify purpose(s)], to exhibit the aircraft, or participate in events outlined in [identify applicant]'s program letter (or any amendments) describing compliance with CASR part 91 sec. 21.193(d). In addition, this aircraft must be operated in accordance with applicable air traffic and general operating rules of part 91, and all additional limitations herein prescribed under the provisions of CASR part 91 sec. 91.319(e). These operating limitations are a part of DAAO Form No. 21-24, and are to be carried in the aircraft at all times and be available to the pilot in command of the aircraft.
- (24) All proficiency/practice flights must be conducted within the geographical area described in the applicant's program letter and any modifications to that letter, but that area will not be more than 600 nautical miles from the aircraft's home base airport. An exception is permitted for proficiency flying outside of the area stated above for organized formation flying, training, or pilot checkout in conjunction with a specific event listed in the applicant's program letter (or amendments). The program letter should indicate the location and dates for this proficiency flying.
- (25) This aircraft is restricted to airports that are within airspace classes C, D, E, and G during proficiency flights, except in the case of a declared emergency or when otherwise directed by air traffic control.
- (26) The owner/operator of this aircraft must submit an annual program letter update to the DGCA Flight Operations that lists airshows, fly-ins, etc., that will be attended during the next year, commencing at the time this aircraft is released for operation. This list of events may be amended, as applicable, by letter or fax prior to the intended operation amendments. A copy of the highlighted aeronautical chart, when applicable, must be carried aboard this aircraft and be available to the pilot.

- (27) This aircraft is authorized for flights or static display at airshows, air races, and in motion pictures conducted under a waiver issued in accordance with CASR part 91 sec. 91.903.
- (28) After completion of phase I flight testing, unless appropriately equipped for night and/or instrument flight in accordance with CASR part 91 sec. 91.205, this aircraft is only to be operated under day VFR.
- (29) Aircraft instruments and equipment installed and used under CASR part 91 sec. 91.205 must be inspected and maintained in accordance with the applicable requirements of CASR parts 43 and 91. Any maintenance or inspection of this equipment must be recorded in the aircraft maintenance records.
- (30) Aerobatic maneuvers that have been satisfactorily accomplished and recorded during the flight test time period may be performed.
- (31) The special airworthiness certificate and attached operating limitations for this aircraft is valid for one year. When an aircraft's base of operation is changed or there is a transfer of ownership, the new owner/operator will provide the DGCA with a copy of the approved inspection program, identifying the person responsible for scheduling and performing the inspections.
- (32) This aircraft must not be used for glider towing, banner towing, or intentional parachute jumping.
- (33) This aircraft does not meet the requirements of the applicable, comprehensive, and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. The owner/operator of this aircraft must obtain written permission from another country's CAA before operating this aircraft in or over that country.
- (34) Flights to airports other than an alternate airport and the airport where the aircraft is based are allowed for maintenance of the aircraft. (Maintenance, as defined in CASR part 1 sec. 1.1, is the reference for the purpose of these flights.) Before the flight, the operator must notify and receive permission from the DGCA where the maintenance will take place, and notify where the aircraft is based on the intended maintenance flight. The maintenance performed in connection with the flight must be recorded in the aircraft records in accordance with CASR part 43.
- (35) The following placard, pertaining to gliders and sail planes having experimental certificates, must be displayed in the cockpit in full view of the pilot in addition to the requirements of CASR part 91 sec. 91.9. "NOTE: No person may exceed the designer's or builder's recommended limitations as follow:
maximum gross weight _____ ; CG limits _____
; airplane tow speed _____ ; maximum airspeed in
smooth air _____ ; and maximum airspeed in rough
air _____ ." (Applicability: Group I).

4114-4124. RESERVED

SECTION 11. CERTIFICATION AND OPERATION OF AIRCRAFT UNDER THE
EXPERIMENTAL PURPOSE(S) OF RESEARCH AND DEVELOPMENT, SHOWING
COMPLIANCE WITH REGULATIONS, CREW TRAINING, MARKET SURVEYS AND
OPERATING KIT-BUILT AIRCRAFT

4125. GENERAL.

Under the provisions of CASR part 21 sec. 21.191(a), R&D aircraft are defined as aircraft that test new design concepts, aircraft equipment, installations, operating techniques, or new uses for aircraft. Under the provisions of sec. 21.191(b), show compliance aircraft are defined as aircraft that conduct flight tests and other operations to show compliance with the regulations. This includes flights to show compliance for the issuance of type and STCs, major design changes, and function and reliability requirements. Under the provisions of sec. 21.191(c), crew training aircraft are defined as aircraft involved in the training of the applicant's flight crews. Under the provisions of sec. 21.191(f), market survey aircraft are defined as aircraft that are used for conducting market surveys, sales demonstrations, and customer crew training as provided for in sec. 21.195. Under the provisions of sec. 21.191(h), operating kit-built aircraft is defined as operation of a PCA that meets the criteria of sec. 21.24(a)(1) that was assembled by a person from a kit manufactured by the holder of a PC for that kit, without the supervision and quality control of the PC holder under sec. 21.184(a).

- a. Research and Development. Any aircraft would be eligible for an experimental certificate under this purpose. Although the operations may eventually lead to a TC, they may be conducted by the applicant only as a matter of research or to determine whether an idea warrants further development. In addition to the operations specified in CASR part 21 sec. 21.191(a), the operation of a chase plane, a tanker used for in-flight icing tests, or other aircraft not otherwise eligible for a standard or an experimental certificate (R&D), but necessary for use in direct connection with the R&D project, is considered to be within the scope of this purpose. Aircraft currently certificated in the experimental category for the purposes of exhibition or air racing also may be eligible for a special airworthiness certificate for the experimental purpose of R&D.
- b. Showing Compliance with Regulations. This purpose would be considered valid when the applicant for a TC or an aircraft modifier has revised the TC design data or has applied for an STC or field approval. The purpose is to show compliance to the CASR after the applicant has completed testing under R&D, if applicable, and has completed flight testing by the DGCA. In addition to the operations specified in CASR part 21 sec. 21.191(b), the operation of a chase plane or other aircraft not otherwise eligible for a standard or experimental certificate, but necessary for use in direct connection with a type certification project, is considered to be within the scope of this purpose.
- c. Crew Training. Under CASR part 21 sec 21.191(c), this purpose is limited to only the applicant's flight crews, which normally would be the manufacturer's employees necessary to be trained in experimental aircraft. These flight crews operate aircraft being flight tested in type

certification programs or for production flight testing. Crew training of the manufacturer's customers in experimental aircraft is covered in paragraph 163 below.

- d. Market Surveys. A ROI manufacturer of aircraft or engines and persons that alter aircraft may apply for a special airworthiness certificate in the experimental category for the purpose of market surveys, sales demonstrations, and customer crew training under CASR part 21 sec. 21.195. Amateur-built aircraft kit manufacturers also may be eligible to give customer familiarization training under CASR part 21 sec. 21.191(f).
- e. Operating Kit-Built Aircraft. If a kit is assembled without the benefit of the PC holder's supervision, the aircraft may qualify for an experimental certificate in accordance with CASR part 21 sec. 21.191(h). The purchaser or owner of the kit is not required to assemble or fabricate any specific portion of the kit; assistance for some or all of the work may be obtained from other sources, such as the PC holder or some other fabricator. The kit, however, must have been manufactured by a PC holder.

4126. RESERVED.

4127. PC HOLDER AND MODIFIER EXPERIMENTAL OPERATING PROCEDURE.

PC holders and modifiers may submit to DGCA for approval a procedure describing the operation of experimental aircraft. After it is approved, the procedure may be listed in the operating limitations as indicated in paragraph 472b of this SI. The principal inspector (PI) may exclude certain aircraft from the privileges of either all or part of this procedure, for example, the first of a model, such as the CN-235, or a nonproduction R&D aircraft. The procedure should include at least the following elements:

- a. A description of the test area that will be used to show compliance with CASR part 91 sec. 91.319(b). This area must be over open water or sparsely populated areas having light air traffic. The size of the area shall be that required to safely conduct the type of anticipated maneuvers and test, as appropriate. Multiple purpose certificates may require individually prescribed geographical areas.)
- b. A description of the method for showing compliance with CASR part 91 sec. 91.319(b); i.e., all flights must be conducted in the area described in paragraph, 443a, a log/daily flight sheet entry by the pilot showing compliance with CASR part 91 sec. 319(b) and inspection of the aircraft prior to release for flights in the expanded test area.
 - (1) This procedure will insure that unproven aircraft comply with CASR part 91 sec 91.319(b). An unproven aircraft is an individual aircraft that has not been flight tested to show that it is controllable throughout its normal range of speeds and throughout all maneuvers to be executed, and has no hazardous operating characteristics or design features. This includes major changes to the aircraft subsequent to the original showing of compliance with CASR part 91 sec. 91.319(b).
 - (2) This procedure will also describe the method for identifying (for the pilot, etc.) that the aircraft has complied with CASR

- part 91 sec. 91.319(b) and may utilize the expanded test area; e.g., suitable entry or stamp on the log or daily flight sheet.
- (3) The above records will be maintained for the duration of the certificate for review by the DGCA Inspector.
- c. A description of the expanded test area of operation; e.g., state boundary; including the control of flights outside the expanded area; e.g., the continental R.I. when looking for specific weather conditions, including the method for recording such flights and maintaining these records for the duration of the certificate for review by the DGCA. (This procedure will eliminate the need for the PC/API holder to obtain approval for flights outside the expanded area).
- d. A description of the method to control the persons that may be carried. This description must incorporate the following provisions:
- (1) (No person may be carried in the aircraft during flight unless that person is required for the purpose of the flight, except as provided in paragraph 443 d(4).
 - (2) The pilot in command is responsible for advising each person carried of the experimental nature of the aircraft (reference CASR part 91 sec. 91.3(a) and 91.319(d)).
 - (3) The method for recording of persons carried on each flight should be specified and those records maintained for the duration of the certificate for review by the DGCA Inspector.
 - (4) Persons other than flight crew may be carried when the following conditions are met:
 - (i) The aircraft is of the same basic-model that has previously shown compliance with CASR part 91 sec. 91.319(b) and part 21 sec. 21.195;
 - (ii) The aircraft has been proven in accordance with paragraph 443 b(1);
 - (iii) Any flight tests must not include intentional maneuvers involving abrupt changes in the aircraft's attitude, abnormal attitudes, or abnormal accelerations/decelerations not necessary for normal flight;
 - (iv) The procedures specifically cover the types of flying to be permitted while carrying passengers other than crew members; and
 - (v) The following placard(s) is displayed inside the aircraft, in letters at least 3/8 inches in height and in a location(s) easily visible and legible to all persons entering the aircraft:

PASSENGER NOTICE

THIS AIRCRAFT DOES NOT COMPLY WITH INDONESIAN
CIVIL AVIATION SAFETY REGULATIONS FOR STANDARD
AIRCRAFT

- (vi) A description of the method for determining that the aircraft is in the condition appropriate for the purpose intended when changing from one purpose to another (multiple purpose certificates) and documenting this inspection in the log or daily flight sheet; e.g.,

changing from research and development to market survey.

- (vii) Any other condition deemed necessary in the interest of safety by the DGCA.
- (viii) A copy of this procedure must be carried in the aircraft when operating under the privileges of this procedure. (A copy of this procedure may also be included or directly referenced in the PC/APIS holder's quality manual for the convenience of the manufacturer and the DGCA Inspector. However, enforcement, if appropriate, would be under CASR 91.319(e) and not CASR Part 21, Subpart F or G).

4128. ISSUANCE OF EXPERIMENTAL RESEARCH AND DEVELOPMENT, SHOWING COMPLIANCE WITH REGULATIONS, CREW TRAINING, MARKET SURVEYS, AND OPERATING LIMITATIONS

- a. Operating limitations must be designed to fit the specific situation encountered. The DGCA Inspector may impose any additional limitations deemed necessary in the interest of safety. The DGCA Inspector and/or designee must review each imposed operating limitation with the applicant to ensure that the operating limitations are understood by the applicant.
- b. The following operating limitations must be prescribed as applicable:
 - (1) No person may operate this aircraft unless DAAO Form No. 21-24, Special Airworthiness Certificate is displayed at the cabin or cockpit entrance and visible to passengers or flight crew members. (Applicability: All)
 - (2) No person may operate this aircraft for other than the purpose of R&D, showing compliance with regulations, crew training; market surveys, to accomplish the flight operation outlined in the program letter dated _____, which describes compliance with CASR Part 21 sec. 21.193(d), and has been made available to the pilot in command of the aircraft. In addition, this aircraft must be operated in accordance with applicable air traffic and general operating rules of CASR part 91, and all additional limitations herein prescribed under the provisions of sec. 91.319(e). (Applicability: All)
 - (3) All flights must be conducted within the geographical area described as follows: The area must be described by radius, coordinates, and/or landmarks. The designated area must be over open water or sparsely populated areas having light air traffic. The size of the area must be that required to safely conduct the anticipated maneuvers and tests. Multiple-purpose certificates may require individually prescribed geographical areas.

NOTE: This applies to all certificates issued to show compliance with CASR part 91 sec. 91.319(b). When the DGCA finds compliance, the operating limitations will be revised to remove the limitation. The aircraft will not be allowed to operate over densely populated areas or in congested airways in accordance with sec. 91.319(c). The DGCA may permit takeoffs and landings to be conducted over densely populated

areas or in congested airways. If this operating limitation is issued, it should say, "Except for takeoffs and landings, this aircraft must not be operated over densely populated areas or in congested airways." Limitation No. 5 may be specified in lieu of this operating limitation for PC holders who have submitted a procedure in accordance with paragraph 164.

- (4) All flights of this aircraft must be conducted within the geographic area. (Applicability: Except operating kit-built aircraft)
- (5) All flights of this aircraft must be conducted in accordance with describe the PC holder's approved operating procedure, for example, PT. Garuda Semesta Experimental Operating Procedure No. 12 dated 10 February 2012). (Applicability: Except operating kit-built aircraft)

NOTE: Limitation No. 5 may be specified in lieu of Nos. 3 and 4 for PC holders that have submitted a procedure in accordance with paragraph 164 of this Staff Instruction.

- (6) When changing between operating purposes of a multiple-purpose certificate, the operator must determine that the aircraft is in a condition for safe operation and appropriate for the purpose intended. A record entry will be made by an appropriately rated person to document that finding in the aircraft logbook. (Applicability: Except operating kit-built aircraft).
- (7) This aircraft must not be operated unless it is inspected and maintained in accordance with appropriate military technical publications and/or manufacturer's recommendations. The owner/operator must select, establish, identify, and use an inspection program as set forth in CASR part 91 sec. 91.409(e), (f), (g), and (h). This inspection program must be recorded in the aircraft maintenance records. (Applicability: All)
- (8) The pilot in command of this aircraft must hold an appropriate category/class rating. If required for the type of aircraft to be flown, the pilot in command also must hold either an appropriate type rating or a letter of authorization issued by a DGCA. (Applicability: All)
- (9) This aircraft is to be operated under VFR, day only. (Applicability: All)

NOTE: Section 91.319(d)(2) provides for VFR, day only, unless otherwise specifically authorized by the Administrator. This limitation gives that authorization. If other operations are requested for "night operation" or under IFR, the aircraft must be properly equipped in accordance with sec. 91.205.

- (10) No person may operate this aircraft for carrying persons or property for compensation or hire. (Applicability: All)
- (11) No person may be carried in this aircraft during flight unless that person is essential to the purpose of the flight. (Applicability: R&D and show compliance only, for PC holder's this limitation may be allowed to carry person in accordance with approved operating procedure)

- (12) The pilot in command of this aircraft must advise each passenger of the experimental nature of this aircraft, and explain that it does not meet the certification requirements of a standard certificated aircraft. (Applicability: All)
- (13) This aircraft must contain the placards, markings, etc., (or other operating instructions developed for an STC modification) required by CASR part 91 sec. 91.9.
- (14) This aircraft is prohibited from aerobatic flight that is intentional maneuver involving an abrupt change in the aircraft's attitude, an abnormal attitude, or abnormal acceleration not necessary for normal flight. (Applicability: All)

NOTE: Aerobatic flights may be permitted in the assigned test area. The applicant should be advised that aerobatics or violent maneuvers should not be attempted until sufficient flight experience has been gained to establish that the aircraft is satisfactorily controllable. These operating limitations may be modified to include only those aerobatics/maneuvers that have been satisfactorily accomplished and recorded in the aircraft records during the flight test period. These aerobatics/maneuvers may be permitted upon leaving that assigned test area. Appropriate limitations identifying the aerobatics/maneuvers and conditions under which they may be performed should be prescribed. The DGCA may witness aerobatics/maneuvers if deemed necessary.

- (15) This aircraft may conduct aerobatic flight in accordance with CASR part 91 sec. 91.303. Aerobatics must not be attempted until sufficient flight experience has been gained to establish that the aircraft is satisfactorily controllable and in compliance with sec. 91.319(b). Aerobatic maneuvers intended to be performed must be satisfactorily accomplished and recorded in the aircraft records during the flight test period. (Applicability: All)
- (16) This aircraft must not be used for glider towing, banner towing, or intentional parachute jumping. (Applicability: All)
- (17) No person must operate this aircraft unless within the preceding 12 calendar months it has had a condition inspection performed in accordance with appendix D to CASR part 43, or other DGCA-approved programs, and was found to be in a condition for safe operation. This inspection will be recorded in the aircraft maintenance records. (Applicability: All)
- (18) Only DGCA-certificated mechanics with appropriate ratings as authorized by CASR part 43 sec. 43.3 may perform inspections required by these operating limitations. (Applicability: All)
- (19) Inspections must be recorded in the aircraft maintenance records showing the following, or similar worded, statement: "I certify that this aircraft has been inspected on _____, in accordance with the scope and detail of appendix D to CASR part 43, or other DGCA approved programs, and was found to be in a condition for safe operation." The entry will include the aircraft's total time-in-service, and the name, signature, certificate number, and type of certificate held by the person performing the inspection. (Applicability: All)

- (20) If aircraft, engine, or propeller operating limitations are exceeded, an appropriate entry will be made in the aircraft records. (Applicability: All)
- (21) This aircraft must not be operated unless it is maintained and inspected in accordance with the requirements of CASR part 43. (Applicability: All)
- (22) Aircraft must display the word "EXPERIMENTAL" in accordance with CASR part 45 sec. 45.23(b). (Applicability: All)
- (23) The pilot in command of this aircraft must notify air traffic control of the experimental nature of this aircraft when operating into or out of airports with operating control towers. The pilot in command must plan routing that will avoid densely populated areas and congested airways when operating VFR. (Applicability: All)
- (24) This aircraft does not meet the requirements of the applicable, comprehensive, and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. The owner/operator of this aircraft must obtain written permission from another country's CAA prior to operating this aircraft in or over that country. That written permission must be carried aboard the aircraft together with the U.S. airworthiness certificate and, upon request, be made available to an DGCA inspector or the CAA in the country of operation. (Applicability: All)
- (25) Aircraft instruments and equipment installed and used under § 91.205 must be inspected and maintained in accordance with the requirements of parts 43 and 91. Any maintenance or inspection of this equipment must be recorded in the aircraft maintenance records. (Applicability: All)
- (26) Application must be made to the DGCA for any revision of operating limitations. (Applicability: All)

4129-4135. RESERVED

SECTION 12. PROVISIONAL AIRWORTHINESS CERTIFICATION

4136. GENERAL.

Under the provisions of CASR part 21, Subpart I, two classes of provisional airworthiness certificates may be issued. Class I certificates may be issued for all categories, whereas Class II certificates are issued for transport category aircraft only. In each case, a corresponding provisional type certificate or provisional amendment to the type certificate must be in effect to be eligible for a corresponding provisional airworthiness certificate.

4137. ELIGIBILITY.

Only a ROI aircraft manufacturer, aircraft engine manufacturer, or certificated air carrier may apply for provisional airworthiness certificates as provided in CASR 21, Subpart I. Since the aircraft is normally one which is being used in the type certification process, the DGCA manufacturing inspector should already be generally familiar with its progress and conformity status. Therefore, upon determining that the application and attachments are satisfactory, he need only inspect the aircraft to the extent he considers necessary to determine that it is in a condition for safe operation when operated within its operating limitations.

4138. SPECIAL PURPOSE OPERATIONS.

The special purpose operations for which provisionally certificated aircraft may be operated is contained in CASR part 91 sec. 91.317. These operations include:

- a. Training flight crews, including simulated air carrier operations;
- b. Demonstration flights by the manufacturer for prospective purchasers;
- c. Market surveys by the manufacturer;
- d. Flight checking of instruments, accessories and equipment, that does not affect the basic airworthiness of the aircraft; or
- e. Service testing of aircraft.

4139. STATEMENT OF CONFORMITY, DAAO FORM NO. 21-07.

A properly completed Statement of Conformity, DAAO Form No. 21-07, containing the information required by CASR part 21 sec. 21.221 and sec. 21.223, may be used by the manufacturer as his conformity statement and should be attached to the Application for Airworthiness Certificate, DAAO Form No. 21-21.

4140. CERTIFICATION PROCEDURES.

The DGCA should follow the appropriate procedures outlined in paragraph 4002 of this order.

4141. SPECIAL AIRWORTHINESS CERTIFICATE, DAAOFORM 21-24.

Upon a satisfactory determination that the aircraft conforms to its provisional type certificate, or provisional amendment to a type certificate,

and is in a condition for safe operation, the DGCA should issue the Special Airworthiness Certificate, DAAO Form No. 21-24. The issuance of a provisional airworthiness certificate, corresponding with a provisional amendment to a type certificate (CASR part 21 sec.21.225), is considered to be an original issuance in the provisional category.

4142. OPERATING LIMITATIONS.

Operating limitations, established for the issuance of the provisional type certificate, are considered to be a part of the provisional airworthiness certificate issued to an individual aircraft. The DGCA inspector should, therefore, determine that they are available in the aircraft, in compliance with CASR part 91 sec. 91.9. Limitations and restrictions, as required by CASR part 91 sec. 91.317, and which may not be included in placards or the provisional flight manual, should be enumerated on a separate sheet and displayed with the provisional airworthiness certificate.

4143-4160. RESERVED.

SECTION 13. SPECIAL FLIGHT PERMIT

4161. GENERAL.

- a. Special flight permits are issued for aircraft that may not currently meet applicable airworthiness requirements, but are capable of safe flight. A special flight permit is not an authorization to deviate from the requirement of CASR part 91.
 - (1) CASR part 21 sec. 21.197(a) applies to aircraft which may not meet applicable airworthiness requirements and which will be operated for a purpose specified in CASR part 21 sec. 21.197(a)(1) through (5).
 - (2) CASR part 21 sec. 21.197(b) applies to aircraft which will be operated overweight, and which meet all applicable airworthiness requirements except those which cannot be met because of the overweight condition.
- b. DAAO Form No. 21-21, Application for Airworthiness Certificate, and DAAO Form No. 21-24, Special Airworthiness Certificate, are used for the administration of CASR part 21 sec. 21.197 and 21.199. The instructions for completion of these forms are contained in Chapter 8 except as noted in this Section.
- c. The validity of the special flight permit is not affected by the operation of the aircraft outside the border of the R.I. so long as it is operated for the intended purpose under CASR part 21 sec 21.197 and within the time frame specified on the permit. The special flight permit, however, does not authorize flight over foreign countries without permission of that country. If such operation is contemplated, then the effectiveness of the permit is contingent and it becomes the responsibility of the owner/operator to obtain such permission.
- d. In accordance with CASR part 39 sec 39.7, anyone who operates a product that does not meet the requirements of an applicable AD is in violation of this section. If an AD requires compliance before further flight and does not have a provision for the issuance of special flight permits, the operation of an aircraft to which it applies would not be permitted and a special flight permit should not be issued.
- e. If the product is not an aircraft, and the AD does not provide for the product's operation during a ferry flight, the product may not be operated during such a flight (ref. CASR part 39 sec 39.7. If the aircraft on which the product is installed can be safely operated without operating the product, a special flight permit could be issued with a limitation that the product be rendered inoperative in flight (ref. CASR Part 21 sec. 21.197(a)).

4162. PURPOSES.

CASR part 21 sec. 21.197 prescribes the general purposes for which a special flight permit may be issued. In addition, the following specific operations are also considered to be within the scope of the general provisions:

- a. The flight for any purpose covered by CASR A 21.197 of a R.I - registered aircraft, even though a type certificate has not been issued, if the aircraft is capable of safe flight.
- b. The delivery of an aircraft of either R.I. or foreign manufacture to the base of the purchaser or to a storage point in the ROI.
- c. The operation of non-air carrier multiengine aircraft with one engine inoperative. (The provisions of CASR part 91 sec. 91.611 should be used as a guide.)
- d. For flying an aircraft, whose annual inspection has expired, to a base where an annual inspection is to be made.
- e. For flying an amateur-built aircraft, whose annual condition inspection has expired, to a base where the annual condition inspection is to be made.
- f. Production flight testing of LSA in accordance with CASR part 21 sec. 21.190(c)(7).

4163. APPLICATION AND ISSUANCE - GENERAL

- a. When the application for a Special Flight Permit (DAAO Form No. 21-21, Application for Airworthiness Certificate) is found in compliance with all requirements, the DGCA should issue a Special Airworthiness Certificate, DAAO Form No. 21-24, together with operating limitations deemed necessary for safe operation. The operating limitations should be enumerated on a separate sheet, identified with the aircraft by registration and serial number, dated, and signed. The applicant should be advised that the special airworthiness certificate and operating limitations must be displayed in the aircraft in accordance with CASR part 91 sec. 91.203(b).
- b. The DGCA may assist the applicant, by completing, DAAO Form 21-21, based on information furnished by telephone, letter or fax. The name of the applicant should be entered in the space provided for his signature. A notation as to how the information was received should be entered above his name, e.g., "Received by letter dated _____." If the information provided is adequate, and all requirements for issuance are satisfied, the DGCA may issue a Special Airworthiness Certificate with appropriate limitations (except CASR part 21 sec. 21.197(b) for overweight operations). These limitations will include inspection requirements as deemed necessary. The Special Airworthiness Certificate and prescribed operating limitations must be displayed in the aircraft in accordance with CASR part 91 sec. 91.203(b) prior to conducting the special flight.
- c. A copy of each certification document should be retained in the files of the DGCA office.

4164. AIRCRAFT INSPECTION

- a. It is the responsibility of the DGCA to determine whether or not inspections or tests are necessary to ensure that the aircraft is capable of safe flight for the intended purpose.
- b. The DGCA should make, or require the applicant to make, appropriate inspections or tests considered necessary for safe flight.
- c. The DGCA should inspect damaged aircraft or an aircraft where the airworthiness is questionable in any respect. Additionally, the DGCA should inspect the LSA for which a special flight permit may be

issued. The DGCA is authorized, at its discretion, to allow a properly certificated mechanic or a repair station to conduct the necessary aircraft inspection(s) in support of the issuance of a special flight permit.

Note: If an affirmative, technical determination cannot be made that a particular aircraft is capable of safe operation because of insufficient design, inspection, or maintenance data that normally is available for a type-certificated aircraft, the special flight permit should not be issued.

- d. When the DGCA requires the applicant to make the inspection, the applicant must be advised that such inspection must be:
 - (1) Accomplished by an appropriately certificated mechanic or repair station familiar with all the procedures and requirements contained in this chapter; and
 - (2) Documented in the aircraft logbook by the authorized person who conducted this inspection.

4165. SPECIAL OPERATING LIMITATIONS.

The DGCA should establish limitations as deemed necessary for safe operation. Since individual Circumstances may vary greatly, a list of limitations applicable in every case cannot be provided. The objective is to assure safe operation of the aircraft, and if necessary, technical assistance of other DGCA offices or specialties should be utilized. Limitations should be clear and concise so they can be easily understood. In addition to the limitations deemed necessary for the particular flight, the following items should be considered when establishing operating limitations.

- a. Technical data to which the aircraft must conform.
- b. Operational equipment necessary for safe operation of the aircraft.
- c. Special crew member and pilot qualifications required. (For flights which involve long distances where various weather conditions may be encountered, the pilot-in-command should also be appropriately instrument rated.)
- d. Aircraft weight limits.
- e. Fuel and fuel distribution limits.
- f. Center of gravity limits.
- g. Maneuvers to which the aircraft limited.
- h. Limits on usage of flight equipment, such as autopilots, etc.
- i. Meteorological conditions to be avoided (and the inspections required if inadvertently encountered.
- j. Airspeed limits as required.
- k. Areas on the ground which should be avoided to ensure safety of the general public.
- l. Runway selections if considered necessary for safety.
- m. Route to be flown.
- n. Communications required with airport tower personnel to inform them prior to takeoff or landing of the nonstandard condition of the aircraft.
- o. Requirement for Flight Over an ICAO Country. The operating limitations issued with the special flight permit should include, when appropriate, the following statement:

“This aircraft does not comply with the International Airworthiness Standards of Annex 8 to the Convention on International Civil aviation as follows:(DESCRIBE HERE THE ITEM (S) WHICH DO NOT COMPLY WITH THEAIRWORTHINESS REQUIREMENTS FOR STANDARD AIRCRAFT.)”

- p. Any other limitation that should be prescribed for the particular flight.

4166. SPECIAL FLIGHT PERMIT FOR OPERATION OF OVERWEIGHT AIRCRAFT.

a. General.

- (1) The DGCA two primary concerns when issuing special flight permits for the temporary operation of overweight aircraft.
 - (i) That the public will be guarded in the event of an accident.
 - (ii) That when the aircraft is returned to a standard configuration, it has not been rendered un-airworthy due to the overweight operations.
- (2) With safety being the primary concern, it is essential that the processing office utilize the technical assistance of other DGCA offices or specialties as deemed necessary to assure the highest degree of safety possible. All installations such as long range fuel system and navigational equipment must be installed in accordance with DGCA-approved data.
- (3) Applications where the proposed maximum weight does not exceed 110 percent of the maximum certificated weight, and the certificated center of gravity limits are not exceeded, may be processed without obtaining an engineering evaluation (except for rotorcraft).
- (4) Applications where the proposed maximum weight exceeds 110 percent of the maximum certificated weight, or the center of gravity limits exceed the certificated limits, must be coordinated with the Sub Directorate of Engineering for engineering evaluation of the structural provisions, and any other provisions deemed necessary.
- (5) All applications for rotorcraft must be coordinated with the Sub Directorate of Engineering for an engineering evaluation of the structural and flight provisions or any other provisions deemed necessary.
- (6) The processing of an application should encompass a review of the airworthiness status of the basic aircraft, an evaluation of the added installations which constitute the excess weight, the required crew qualification, and the proposed operating limitations.

b. Added Installations.

- (1) Technical Data,
 - (i) When the application comes under the provisions of paragraph 488(a)(4) or (5), any drawings and structural reports submitted with the application should be sufficiently detailed to show that the added installations are structurally and functionally safe and to allow a conformity inspection of the added installations.
 - (ii) The structural report should reference the drawings used for the installations.
- (2) Record of added Installations.

- (i) The installations which are added to the aircraft for the intended overweight flight must be recorded in accordance with the requirements of CASR part 43 sec. 43.9.
 - (ii) The following statement must be entered in Section 3 of DAAO Form No. 43-337: No person may operate this aircraft, as altered herein, unless it has within it an appropriate and current special flight permit issued under the provisions of Civil Aviation Safety Regulations Part 21."
- (3) Auxiliary Fuel System Installation. In the evaluation of the auxiliary fuel system installations, the following items should be considered:
- (i) The aircraft and auxiliary fuel system must meet applicable airworthiness requirements, except those which the aircraft cannot meet because of its overweight condition, and must be found safe for the intended flight.
 - (ii) Fuel tanks installed in pressurized area should be tested for the maximum pressure differential existing between cabin pressurization and aircraft maximum operating altitude with fuel tank empty.
 - (iii) Adequate ventilation should be provided for the fuel tanks and the area in which the fuel tank located to prevent the accumulation of fumes which would be detrimental to the crew or present a fire or explosion hazard.
 - (iv) A means should be provided to readily determine the quantity of fuel in the auxiliary tank(s) prior to takeoff. Also, a means should be provided to indicate, prior to takeoff and during flight, the quantity of fuel in that tank which has a vapor/excess fuel return line.
 - (v) The location of the fuel tank in the aircraft is a major factor in determining that the aircraft is safe for flight, since the added fuel and fuel facilities have the greatest effect on the aircraft center of gravity. In addition, the fuel system installation should not restrict entrance to or exiting from the aircraft provided by applicable CASR, and if required under CASR part 23 sec. 23.1001 (Amendment 23-7), should have an adequate fuel jettisoning system installed.
 - (vi) Auxiliary fuel systems which are not complete, that is not connected to the basic aircraft fuel system, should not be considered for issuance of a special flight permit until such time as they are connected to the aircraft fuel system.
- (4) Engine Oil Quantity. The applicant should show that the supply provided for each engine is sufficient to ensure satisfactory cooling and system circulation for the duration of the flight. If considered necessary, an oil transfer system for replenishing the engine oil while the aircraft is in flight should be provided.
- (5) Maximum Weight and Center of Gravity Limits.
- (i) CASR part 21 sec. 21.197(b) limits the excess weight over the certificated maximum weight to the additional fuel, fuel carrying facilities and navigational equipment added for the intended flight. It should be determined that this part of the maximum weight selected by the applicant complies with this requirement.
 - (ii) When numerous alterations are performed, it may be necessary to weigh the aircraft to establish the aircraft weight and the center of gravity (CG) limits. The computations should be evaluated for accuracy. It may also be necessary to require flight test at the new

maximum weight and CG limits to determine that the aircraft is safe for operation. Computed weight and balance information should be reflected on the reverse side of DAAO Form No. 43-337.

- (iii) Operation of rotorcraft excess weights, over the certificated maximum weight, presents some unique conditions over and above those encountered with fixed-wing aircraft; however, special attention should be given to this type of aircraft. A careful evaluation should be made of the effect that the overweight operation has upon the retirement times of critical parts.
- (6) Operating limitations should be prescribed as deemed necessary, and include:
 - (i) Operation in the overweight condition must be conducted to avoid cities, towns, villages, and congested areas, or any other areas where the flights might create hazardous exposure to persons or property.
 - (ii) Runway (specify) must be used for overweight takeoff. (If enroute stop is scheduled, the following must be added to this limitation: Contact DGCA office, (city, routing symbol and telephone number) for runway to be used for overweight takeoff at (city).
 - (iii) A copy of the DAAO Form No. 43-337 covering the additional fuel-carrying facilities and equipment shall be in the aircraft.
 - (iv) Special entries to note required inspection of the aircraft for possible damage due to overweight operation upon completion of overweight flight(s)

4167. SPECIAL FLIGHT PERMIT FOR PRODUCTION FLIGHT TESTING.

A special flight permit issued for production flight testing may be used by a manufacturer to meet the requirements of CASR part 91 sec. 91.203 when operating new production aircraft for the purpose of production flight testing, as provided in CASR part 21 sec 21.197. The permit normally is valid only for the purpose of production flight testing. However, when deemed appropriate, the DGCA may allow both production flight testing and customer demonstration to be entered in block 2 of DAAO Form No. 21-24 as explained in paragraph 4168 of this Staff Instruction. The applicable operating limitations are printed on the reverse side of the Special Airworthiness Certificate, DAAO Form No. 21-24.

a. Eligibility.

- (1) A manufacturer producing aircraft under any of the following Subparts of CASR Part 21 is eligible to obtain special flight permits for production flight testing:
 - (i) Subpart F, "Production Under a Type Certificate"
 - (ii) Subpart G. "Production Certificates,"
- (2) A manufacturer producing aircraft prior to issuance of the type certificate is also eligible for special flight permit for production flight testing if he can meet all of the following conditions:

- (i) The manufacturer holds a type certificate and a currently effective production certificate for at least one other aircraft in the same category.
 - (ii) The DGCA official flight test program, with respect to the issuance of a type certificate, is in process.
 - (iii) A prototype aircraft of the model has been flown by the manufacturer under an experimental certificate to assure that there are no adverse flight characteristics and that production test pilots are fully familiar with the aircraft.
 - (iv) A DGCA-approved production flight test procedure and checklist, for the aircraft involved, will be used to assure that all requirements for production test flights are compiled with.
 - (v) The aircraft is not being flown by the manufacturer for purposes other than production flight tests, except as identified in paragraph 490 of this Staff Instruction.
 - (vi) Limitations have been established to define the production flight test area.
- (3) A manufacturer producing LSA under CASR part 21 sec. 21.190 is eligible to obtain special flight permits for production flight testing within the provisions established in paragraph of this Staff Instruction.

b. Application and Issue.

- (1) Application for a special flight permit for production flight testing is made on an Application for Airworthiness Certificate, DAAO Form No. 21-21.
- (2) The DGCA issuing Special flight permits for production flight testing maintain a copy of the complete file in accordance with record retention requirements. Special flight permits should be issued only for the period needed to complete the production test flight, and no longer than 90 days.

4168. SPECIAL FLIGHT PERMIT FOR CONDUCTIN CUSTOMER DEMONSTRATION FLIGHT

A special flight permit may be used by a manufacturer to meet the requirements of CASR A 91. 203 when operating a new production aircraft for the purpose of conducting customer demonstration flights, in accordance with CASR part 21 sec. 21.197(a) (5). This permit is normally issued only for the above purpose. However, as stated in paragraph 489 of this Staff Instruction, customer demonstration may be listed in block 2 of DAAO Form No. 21-24 along with production flight testing, and will not be issued in conjunction with any other special flight permit purposes. When both flight purposes are listed in block 2 of DAAO Form No. 21-24, the aircraft's operating limitations must clearly state that no customer demonstration flights are allowed until the aircraft has satisfactorily completed its production flight tests. The format for listing both flight purposes is -Production Flight Testing or Customer Demonstration.||

a. Eligibility. A special flight permit for conducting customer demonstration flights may he issued when the following conditions are met:

- (1) The new production aircraft was produced under a PC or TC only, and,
- (2) Has satisfactorily completed production flight tests. (Completion of production flight tests indicate acceptance by the

production flight test pilot and no further flight tests are required).

b. Application and Issue.

- (1) Application for a special flight permit for customer demonstration flights is made on Application for Airworthiness Certificate, DAAO Form No. 21-21. Also, a letter from the manufacturer should be included describing the customer demonstration flights to be made, if sufficient information cannot be included on the application.
- (2) Upon receipt of a properly executed application, the DGCA will inspect the aircraft and prescribe the operating limitations in accordance with paragraphs 4128 and 4165 as deemed necessary for safe operation. The demonstration flight area(s) will also be listed on the operating limitations. Special flight permits should be issued only for the period needed to complete the demonstration flights, and no longer than 90 days.
- (3) The DGCA issuing special flight permits for customer demonstration flights will maintain a copy of the complete file in accordance with record retention requirements.

4169. RESERVED

Figure 4-1. Light-Sport Aircraft Statement of Compliance


	MINISTRY OF TRANSPORTATION DIRECTORATE GENERAL OF CIVIL AVIATION DIRECTORATE OF AIRWORTHINESS AND AIRCRAFT OPERATIONS Karya Building 22 nd floor Jalan Medan Merdeka Barat No. 8 Jakarta Pusat Telp. : (+62-21)3506664 - 3506665 Fax : 3506662			
	LIGHT-SPORT AIRCRAFT STATEMENT OF COMPLIANCE			
I. Aircraft Certification	1. Manufacturer Name:		2. Manufacturer Address: (<i>street, city, zip</i>)	
	3. Aircraft Serial No.:	4. Date of Manufacture: (<i>dd/mm/yyyy</i>)	5. Aircraft Make:	6. Aircraft Model:
	7. Maximum Take-off Weight:	8. Maximum Number Occupants:	9. V _H :	10. V _{SI} :
	Class of light-sport aircraft: (<i>Check all applicable items</i>)			
	<input type="checkbox"/> Airplane <input type="checkbox"/> Powered <input type="checkbox"/> Weight-Shift- <input type="checkbox"/> Glider <input type="checkbox"/> Lighter-Than-			
II. User Applicable Manuals	Consensus Standard(s): (<i>list below or use attachment</i>)		Revision:	Valid Until:
	Aircraft Operating Instructions: (<i>list applicable items</i>)		Revision:	Date issued:
	Aircraft Maintenance and Inspection Procedures: (<i>list applicable items</i>)		Revision:	Date issued:
III. Manufacturer Process Documents	Comments: (<i>any additional statements may be stated here or attached</i>)			
	Manufacturer's Quality Assurance System: (<i>list applicable items</i>)		Revision:	Date:
	Manufacturer's Continued Airworthiness System: (<i>list applicable items</i>)		Revision:	Date:
IV. Manufacturer's Certification	CERTIFICATION: I hereby certify that aircraft serial number complies with the Consensus Standard(s) identified on this statement of compliance and that the Manufacturer's Continued Airworthiness System will be adhered to support the aircraft throughout its life. This aircraft (1) was manufactured following the consensus standard(s) procedures and Manufacturer's Quality Assurance System identified on this statement, (2) conforms to the manufacturer's design data, (3) was ground and flight tested successfully, and (4) is in a condition for safe operation. Additionally, at the			
	Name :		Signature :	
	Title :		Date :	
	Name :		Date :	

Figure 4-2. Sample Program Letter, Research and Development/Showing Compliance Applicant Program Letter Special Airworthiness Certificate

1. Registered Owner (as shown on Certificate of Registration)

NAME _____ :

ADDRESS _____ :

2. Aircraft Description

a. Registration Marks

b. Aircraft

c.

Yr. Mfg.

d. Aircraft Serial No.

e. Aircraft Model Designation

3. Describe program purpose for which the aircraft is to be used (14 CFR 21.193(d)(1)).

4. Provide the following information as it pertains to your Program Letter.

a. List estimated flight hours required for program.

Hrs.:

b. List estimated number of flights required for program.

No. Flts:

c. List estimated duration for programs (CASR part 21 sec. 21.193(d)(2)).

No. Days:

5. Describe the areas over which the flights are to be conducted, and address of base operation


(CASR part 21 sec.21.193(d)(3)).

6. Describe the aircraft configuration (attach three-view drawings or three-view dimensioned photographs of the aircraft (CASR part 21 sec 21.193(d)(4)).

7. Date
Signature

Name and Title (Print or Type)

Figure 4-3 . Sample Special Flight Permit Operating Limitations for LSA Category Production Flight Testing

	<p style="text-align: center;">MINISTRY OF TRANSPORTATION DIRECTORATE GENERAL OF CIVIL AVIATION DIRECTORATE OF AIRWORTHINESS AND AIRCRAFT OPERATIONS Karya Building 22nd floor Jalan Medan Merdeka Barat No. 8 Jakarta Pusat Telp. : (+62-21)3506664 – 3506665 Fax : 3506663 PO. Box 3049, Jakarta 10110 website: www.kubud.dephub.go.id; e-mail: daao_dgca@dephub.go.id</p>
SPECIAL FLIGHT PERMIT OPERATING LIMITATIONS	
Make: GARUDA	Model : G100-1
S/N: 00001	Registration Mark:PK-ABC
<ol style="list-style-type: none">1. No person may operate this aircraft for other than the purpose of meeting the requirements of CASR part 21 sec. 21.190(c)(7) during flight testing. In addition, this aircraft must be operated in accordance with applicable air traffic and general operating rules of 14 CFR part 91 and all additional limitations herein prescribed. These operating limitations are a part of a special flight permit and are to be carried in the aircraft at all times and be available to the pilot in command of the aircraft.2. All flight must be conducted within the geographical area described as follows. The area must be described by radius, coordinates, and/or landmarks. The designated area must be over open water or sparsely populated areas having light air traffic. The size of area must be that required to safely conduct the anticipated maneuvers and tests.3. All flights must be conducted and recorded in accordance with the manufacturer's production acceptance test procedure that meets the applicable consensus standard.4. This aircraft is to be operated under Visual Flight Rules, day only.5. The test pilot in command of this aircraft must hold at least a private pilot certificate, appropriate category, and class ratings to act as pilot in command, and have a minimum of 100 hours as a pilot in command in that category and class.6. The production test pilot is to be the sole occupant.	
Date	
Director Airworthiness and Aircraft Operation	

CHAPTER 5. EXPORT APPROVAL PROCEDURES

SECTION 1. GENERAL INFORMATION

500. GENERAL.

This chapter provides policy and procedure for issuing export approvals under the provisions of CASR Part 21, Subpart L.

- a. The requirements of importing countries/jurisdictions must be met when exporting products or articles from the ROI to these countries/jurisdictions. The requirements for a specific country/jurisdiction may be found in either a bilateral agreement or a specific document submitted to the DGCA for publication that contains import requirements.
- b. "Special requirements" are those administrative requirements that must be satisfied as a condition of shipment at the time of export, for example, the requirement for DAAO Form No. 21-22, as well as copies of logbooks, flight manuals, and other materials. When a product or article does not meet the special requirements of an importing country/jurisdiction, the exporter should first prepare a technical description of the specific nonconformities. The DGCA should then prepare an accompanying cover letter for direct transmittal to the importing CAA requesting the CAA's acceptance of the nonconformities and a return reply to the DGCA before export. The reply from the importing CAA accepting the nonconformities must accompany each application for an Export C of A.
- c. In addition to a written statement of acceptance from the importing CAA, the items not complied with must be identified in the Exceptions block of the Export C of A. A copy of the written statement of acceptance from the importing CAA must be included with the Export C of A.
- d. DAAO Form No. 21-22 certifies compliance with applicable requirements but DOES NOT CONSTITUTE AUTHORITY TO OPERATE AN AIRCRAFT. When issued for new aircraft, the certification is considered original. When the aircraft is imported back into the ROI, the certification is considered recurrent.
- e. An export airworthiness approval is not necessary for products or articles being exported to countries/jurisdictions for which there is no bilateral agreement or definitive import requirements that have been formally notified to the DGCA. A business or contractual agreement between the seller and the purchaser does not constitute or qualify as an authority-to-authority request for an export airworthiness approval. However, the DGCA will issue an export airworthiness approval to countries/jurisdictions that do not have a bilateral agreement or have not formally notified the DGCA of definitive import requirements. This export airworthiness approval applies to all eligible products and articles when they are found to conform to their DGCA-approved design and are in a condition for safe operation.

501-504. RESERVED.

SECTION 2. EXPORT APPROVALS

505. ELIGIBILITY.

Any person may apply for an export airworthiness approval (CASR 21.323). Aircraft are eligible for an Export C of A if they meet the requirements of CASR Part 21 sec. 21.329. Aircraft engines, propellers, and articles are eligible for an export airworthiness approval if they meet the requirements of CASR Part 21 sec. 21.331.

506. EXPORT AIRWORTHINESS APPROVALS.

This section covers the manner in which aircraft, aircraft engines, propellers and articles are exported. A sample DAAO Form No. 21-22, Export Certificate of Airworthiness.

- a. **Unassembled Aircraft.** All new aircraft presented for export approval must be completely assembled and flight tested. Because compliance with the PC rules ensures conformity with the approved type design, aircraft certificated under 14 CFR parts 23 and 27, or CAR parts 3, 4a, and 6, as well as gliders manufactured under a PC, are exempt from this requirement. This exception is made possible due to the relative simplicity of such aircraft and the fact that compliance with the production certification rules should ensure conformity with the approved type design. If these aircraft are shipped unassembled, under section 21.333, the exporter is required to furnish to the importer the manufacturer's assembly instructions and the DGCA approved flight test check off form. Care should be exercised to determine that the importing foreign country has no special requirements that prohibit exporting under these conditions.
- b. **Products Located in Foreign Countries** CASR part 21 sec. 21.325(c) permits the issuance of export approvals for used aircraft, engines, and propellers located in a foreign country. The rule was adopted as a service to Indonesian citizen abroad to assist them in the legitimate disposal of used airworthy used products to other country. Caution should be exercised to ensure that this feature of the rule is not used as a means of obtaining an easy "rubber stamp" approval. Before accepting an application, DGCA should ensure that the applicant is willing and able to meet all applicable requirements.
- c. **Issuance of an Export C of A for ROI.-Manufactured Aircraft Located in Another Country.** The DGCA will not issue DAAO Form No. 21-22 to ROI.-manufactured aircraft located in another country/jurisdiction unless it possesses a valid ROI Airworthiness Certificate. The aircraft would then meet the requirements of CASR part 21 sec. 21.329.
- d. **The Date of Issuance of an Export Airworthiness Approval.** The date of issuance of an export airworthiness approval is the date the product was inspected by the DGCA, found to comply with the applicable requirements, and determined to be airworthy.

507. APPLICATION

Chapter 8 of this SI provides instructions for completing DAAO Form No. 21-19, Application for an Export Certificate of Airworthiness. Part I of the form must be completed for aircraft. Aircraft engines, propellers, and articles do not require a written application.

508. ISSUANCE OF DAAO FORM NO. 21-22 EXPORT CERTIFICATE OF AIRWORTHINESS, FOR AIRCRAFT.

- a. An Export C of A may be issued only for COMPLETE aircraft shown by the applicant to meet the applicable requirements specified under CASR part 21 sec.21.329. An aircraft exported disassembled are considered complete aircraft. An Export C of A should not normally be issued if any components of the product are not installed; for example, when certain components are to be manufactured and installed in the country of import.

Note: CASR part 21 sec. 21.329 permits the issuance of an Export C of A for new or used aircraft. A used ROI.-manufactured aircraft that is foreign-owned and located in the ROI would be eligible for an Export C of A subject to compliance with the other requirements of CASR part 21, subpart L.

- b. Under the provisions of this section, new or used ROI-manufactured aircraft do not require a standard airworthiness certificate or a special airworthiness certificate in the restricted category to be issued prior to export, but are required to meet the requirements for such a certificate. Aircraft manufactured in another country/jurisdiction are required to possess a valid ROI. standard airworthiness certificate issued under the provisions of CASR part 21 sec. 21.183(c), or a special airworthiness certificate in the restricted category issued under the provisions of CASR part 21 sec. 21.185(c) unless a written statement is received from the importing authority accepting the aircraft without an airworthiness certificate. Any other aircraft not meeting the requirements for a standard airworthiness certificate, or a special airworthiness certificate in the restricted or primary category, are not eligible to receive an Export C of A unless the importing country/jurisdiction accepts the aircraft in accordance with CASR part 21 sec. 21.329(b).

509. ISSUANCE OF DAAO FORM NO. 21-18, AIRWORTHINESS RELEASE CERTIFICATE, FOR ENGINES, PROPELLERS, AND ARTICLES.

Export airworthiness approvals for aircraft engines, propellers, and articles are issued using DAAO Form No. 21-18. Instructions for completing DAAO Form No. 21-18 are found in SI 21-09 , Procedures for Completion and Use of the Authorized Release Certificate, DAAO Form No. 21-18, Airworthiness Release Certificate.

510. RESPONSIBILITIES OF EXPORTERS (CASR Part 21 sec. 21.333).

Each exporter receiving an export airworthiness approval for a product or article must:

- a. Forward to the importing country/jurisdiction all documents and information specified by that country/jurisdiction.
- b. Preserve and package products and articles as necessary to protect them against corrosion and damage during transit or storage and state the duration of effectiveness of such preservation and packaging.
- c. Remove, or cause to be removed, any temporary installation incorporated on an aircraft for the purpose of export delivery and restore the aircraft to the approved configuration upon completion of the delivery flight.
- d. Secure all proper foreign entry clearances from all of the countries/jurisdictions involved when conducting sales demonstration or delivery flights.
- e. Ensure that the following regulatory responsibilities under CASR part 21 sec. 21.333 (when the title to an aircraft passes or has passed to a foreign purchaser) are fulfilled. The DGCA should remind the exporter of these responsibilities Request cancellation of the ROI. registration and airworthiness certificates from the DGCA, giving the date of the transfer of title and the name and address of the new owner.
- f. Although not specifically described in the regulations, when exporting an unassembled aircraft, the exporter should forward the manufacturer's assembly instructions and an DGCA- approved flight test checkoff form to the CAA of the importing country/jurisdiction.

511. DETERMINATION OF "NEW" AND "USED" PRODUCTS OR ARTICLES.

- a. The regulations do not define -new|| or -used|| products or articles. There should be no problem in making this determination with uninstalled aircraft engines, propellers, or articles, because any time-in-service makes them used.
- b. An aircraft may be considered new as long as ownership is retained by the manufacturer, distributor, or dealer; if there is no intervening private owner, lease, or time-sharing arrangements; and if the aircraft has not been used in any pilot school and/or air taxi operation. An aircraft is still considered new regardless of the operating time logged by the manufacturer, distributor, or dealer when the following apply:
 - (1) The aircraft is built from spare and/or surplus articles, even though the articles may be used as well as new, and has been operated under an experimental airworthiness certificate only for the purpose of conducting flight tests for meeting the requirements set forth in CASR Part 21 sec. 21.127 by the applicant and by a DGCA test pilot.
 - (2) The aircraft has been maintained in accordance with the overhaul provisions of CASR Part 43, as applicable.

512. PROCESSING AND PREPARATION OF EXPORT C OF A.

The following instructions will be adhered to in processing applications and issuing Export C of A for Aircraft.

- a. Review. Upon receipt, the Application for Export Certificate of Airworthiness, DAAO Form No. 21-19, Part I, will be reviewed to determine that the product is eligible and that the application has been properly completed and signed. This review includes a determination as to the acceptability of all other data which the applicant is required by the regulation to submit, as applicable to each case. Airplane and rotorcraft flight manuals must be current, including DGCA engineering approval of changes, as required by the applicable CASRs.
- b. Product Inspection. If the application is in order, the DGCA will inspect the product to the extent necessary (including review of substantiating records) to ensure that the product is airworthy, that it conforms to its DGCA specification or type certificate data sheet and, that the special requirements, if any, of the importing country have been met. Except for the latter and the rules applicable to used products, airworthiness determination will be made in a manner similar to R.I. domestic certification or approval.
- c. If the aircraft has been examined and found to be nonconforming with the DGCA type design, or the import type design; or the special import requirements have not been met, the Export C of A should not be issued until either:
 - (1) The applicant corrects the nonconformities, or
 - (2) The DGCA obtains a written statement from the CAA of the importing country/jurisdiction signifying its acceptance of the product with the nonconformities as listed. Requests for acceptance of nonconformities to the importing country CAA should be transmitted to and received from authority to authority. The exporter should first prepare a technical description of the nonconformities to the type design or specific nonconformities related to other special importing requirements. The DGCA should then prepare an accompanying cover letter for direct transmittal to the importing CAA requesting the CAA's acceptance of the nonconformities and a return reply to the DGCA before export. Electronic mail may be used to expedite this process as long as the DGCA can confirm that the required statement is sent by authorized personnel within the importing CAA.
 - (3) If a written statement of acceptance is received by the DGCA from the importing CAA, the nonconformities should be listed on the Export C of A under "Exceptions" with a reference to the importing CAA's written statement of acceptance (for example, letter by subject and date). A copy of the written statement of acceptance from the importing CAA must then be attached to the Export C of A. Other items not related to the type design but failing to meet the importing country's/jurisdiction's requirements will be attached to the Export C of A. The completed Export C of A and a copy of the importing CAA's letter, facsimile, or other such document, should be provided to the exporter, and the product may then be released for export.
 - (4) Upon determining that the product is satisfactory, DAAO Form No. 21-22 will be prepared.

NOTE: THE EXPORT C OF A IS AN OFFICIAL R.I. GOVERNMENT DOCUMENT ISSUED TO FOREIGN COUNTRIES, ALL ENTRIES WILL BE TYPEWRITTEN AND NO ERASURES OR STRIKEOVERS ARE PERMITTED. Both copies of the certificate will be signed in ink over the typed name of the

authorized DGCA. The original will be turned over to the applicant or his representative, together with those documents required with the product. Some provision should be made to preclude the Export C of A from becoming mutilated in transit due to its being an official R.I. document.

- (i) Determined the make, model, and serial number of all installed engines and propellers, and operating time (hours/cycles).
- (ii) Determine whether product is New or Used in accordance with paragraph 807.
- (iii) (c) When a foreign manufactured aircraft is being exported to a third party country with whom an airworthiness bilateral agreement is in effect, the following statement will be inserted on the Export C of A under the heading: "Exceptions:" "This (product) was not manufactured in the R.I. and, therefore, this certificate is not issued pursuant to the bilateral agreement providing for the reciprocal recognition of airworthiness certificates between the R.I. and the Government of (name of country) which has stated its willingness to accept this certificate under these conditions, as indicated in their communication, reference dated _____."

NOTE: The above statement would not be applicable if certain bilateral agreements provide for "third party" country acceptance of airworthiness from an importing country which is not the country of manufacture.

- (iv) When temporary installations, such as provisions for extra fuel or navigational equipment, have been made for the purpose of export delivery:
 - A. If the Export C of A is issued AFTER the installation has been made, either by the manufacturer or by other persons, the following statement or equivalent should be inserted under Exceptions: -A temporary [insert type of installation] has been installed in this aircraft in conformity with [insert drawing numbers, or other data to which conformity was shown] to facilitate its delivery flight. This certificate is valid when the temporary installation is removed. Copies of all referenced drawings and data should accompany the original Export C of A when it is submitted to the applicant or the applicant's representative.
 - B. If the Export C of A is issued BEFORE making the temporary installation, such as at the manufacturer's plant, and the aircraft is then flown to another location for installation of the temporary equipment, the Export C of A should reflect the configuration of the aircraft at the time the certificate was issued. It then becomes the responsibility of the exporter and importer to secure the installation documents or data required by the CAA of the country/jurisdiction of import. Export C of A may not be amended, reissued, or revalidated after original issuance.

- (v) If there are no exceptions, type the word -None in the Exceptions block. If additional information is to be provided, it is permissible to type in the words "Additional Information" under the Exceptions block. If the importing country/jurisdiction has notified the DGCA that it wishes to have a conforming statement to its approved design, a statement similar to the following example must be included for new products: "This aircraft conforms to [insert importing country/jurisdiction] approved type certificate number [insert number]."

Note: The conforming statement does not apply to USED aircraft.

- (vi) The entries at the bottom of the form must be completed as follows:
- A. Signature of Authorized Person. The name and DGCA authority of the person signing the form should be typed adjacent to or under the signature with the signature signed in permanent blue or black ink on the original and copy(s).
 - B. Date. Enter the date the inspection of the aircraft was completed.
 - C. Title of the Authorized Person.

513. APPROVAL OF MODIFICATIONS.

In many instances, an aircraft that conforms to the type design may be modified prior to export, in accordance with the foreign purchaser's requirements. The responsibility for approval and recordation of such modifications would primarily be dependent upon the registration status of the aircraft. The following guidelines should be used in issuing Export C of A's for modified Aircraft.

- a. If the aircraft is modified while under R.I. registry, the applicable rules in CASR Part 21 or Part 43 would apply to DGCA approval of the modifications, depending upon whether an airworthiness certificate had been issued for it. Any test flying which may be necessary would require the issuance of an experimental certificate. The Export C of A would not require any listing of exceptions, since the aircraft would meet the appropriate DGCA standards whether the Export C of A is issued before or after the DGCA-approved modifications had been made.
- b. If the aircraft is modified after the aircraft has been removed from R.I. registry, the approval of the modifications would be the responsibility of the civil air authority of the foreign country of registry or intended registry. The applicant / exporter is responsible for obtaining the foreign approval. Any test flying which may be necessary would require the issuance of a special flight authorization. The Export C of A would require no listing of exceptions if the aircraft conformed to the type design before the modifications; but if the Export C of A is issued after the aircraft is modified, then reference to the documentary evidence of foreign approval should be shown under exceptions.

514. RESERVED

515. ROUTING AND PROCESSING OF EXPORT FILES.

After the issuance of DAAO Form No. 21-22, the Manufacturing Inspector must complete part III of DAAO Form No. 21-19. All files must be spot checked by the deputy director of aeronautical product. A spot check will be indicated by the signature in permanent blue or black ink above the typed name. The documents specified in paragraph 807 of this Staff Instruction, including special export files processed, are to be forwarded promptly to SDAP as the final step in the certification process

516. ISSUANCE OF EXPORT CERTIFICATE OF AIRWORTHINESS FOR AIRCRAFT TYPE CERTIFICATED IN MULTIPLE CATEGORIES. (NORMAL AND RESTRICTED).

Operations outside of the normal category operating limitations when in the restricted category, either weight or maneuvering, unless properly approved as appropriate for an aircraft having Standard Airworthiness Certificate would render it impossible to determine the condition for safe operation when the aircraft is to be returned to normal category. Unknown stresses and possible hidden damage to the aircraft structure may have resulted because of the weights, maneuvers, and speeds utilized for the restricted category operations. Therefore, to retain eligibility for issuance of an Export Certification of Airworthiness as a standard aircraft after having been operated in the restricted category, the following would apply:

- a. While being operated in the restricted category, any changes made to the aircraft that are to be retained when in normal category operation, or any operations that are outside of the normal category operating limitations must be approved in accordance with the regulations and procedures applicable to an aircraft having a Standard Airworthiness Certificate.
- b. If the TCDS for an aircraft includes both normal and restricted category, and the maximum gross weight and/or other operating limitations for the restricted category are higher than that for normal category, the aircraft is NOT eligible for issuance of an Export Certificate of Airworthiness as a standard aircraft, after having been operated in the restricted category, unless:
 - (1) The TCDS specifically states that the aircraft is eligible for operation in the normal category after having been operated at the limitations applicable to the restricted category or,
 - (2) If the TCDS does not have such a note or other reference, the operations outside of the normal category operating limitations, including increased gross weight, had been approved as appropriate for an aircraft having a Standard Airworthiness Certificate.

517. ISSUANCE OF EXPORT C OF A FOR RESTRICTED CATEGORY AIRCRAFT.

The following comment will be included under Exceptions: -The above is a restricted category aircraft. This aircraft has not been determined to meet the international standards concerning the airworthiness of aircraft as provided for in Annex 8 to the Convention on International Civil Aviation.¶

518. RESERVED

CHAPTER 6. IMPORT PROCEDURES

SECTION 1. GENERAL INFORMATION

600. GENERAL.

This chapter provides guidance and procedures relative to R.I. airworthiness certification and approval of import aircraft, aircraft engines, propellers, and articles which are exported from a foreign country with which the Republic of Indonesia has an agreement for the acceptance of those products for export and import.

- a. Foreign-manufactured aircraft and related products must be accompanied by one of the following when being imported to the ROI for DGCA airworthiness acceptance:
 - (1) An Export C of A; or
 - (2) A certifying statement issued by the CAA of the country of manufacture, or by the exporting CAA in the case of a third country.
- b. Any deviations from the DGCA-approved design must be noted on the certifying statement. Any deviations must be resolved by the installer before the product is eligible for installation on any ROI.-registered aircraft or product thereof.
- c. DGCA airworthiness approvals for civil aeronautical products imported to the ROI are processed in the following manner:
 - (1) Issuance of ROI airworthiness certificates for completed aircraft is processed in accordance with paragraph 603 of this Staff Instruction.
 - (2) Aircraft engines, propellers, and articles are considered to meet the requirements of CASR when accompanied by certification from the appropriate CAA. Certification confirms the products are of DGCA-approved design and are in a condition for safe operation as outlined in paragraph 610 of this Staff Instruction.
- d. The DGCA requirements for the approval of civil aeronautical products imported to the ROI are set forth in the following regulations:
 - (1) Part 21, subpart H, section 21.183(c) and 21.185(c) establish the regulatory requirements for ROI. airworthiness certification of new imported aircraft. The primary basis for airworthiness certification of used imported aircraft is sec. 21.183(d). New imported aircraft type certificated under a sec. 21.21 TC and manufactured under license by a bilateral country is no longer entitled to a standard airworthiness certificate under the provision of 21.183(d).
 - (2) Part 21, subpart N, Approval of Engines, Propellers, Articles Import, establishes the procedural requirements for airworthiness approval or acceptance of aircraft engines, propellers, Articles manufactured outside the ROI.
 - (3) Part 21, subpart O, Technical Standard Staff Instruction Authorizations, establishes procedures for TSO products. Section 21.617 covers "letter of TSO design approval" for import appliances.

- e. An Export C of A, or another certifying statement, issued by either the DGCA or CAA, assists in airworthiness certification on behalf of the new country of registry. This export certificate does not constitute an "airworthiness certificate" however; issuance of an Export C of A or other certifying statement does constitute original certification.
- f. Modifications or repairs made to an aircraft or related product subsequent to export certification by the CAA may invalidate that certification unless the modifications or repairs are approved by the DGCA.

601-602. TO BE DETERMINED

SECTION 2. IMPORT AIRCRAFT

603. REQUIREMENTS FOR ROI AIRWORTHINESS CERTIFICATION.

To be eligible for the issuance of an airworthiness certificate, a foreign manufactured aircraft must have been type certificated in accordance with CASR 21.29. The regulatory provisions, pertaining to airworthiness certificates, for import aircraft are CASR 21.183(c) and CASR 21.185(c). Any additional requirements called out in CASR parts 36, 39, 45, 47, and 91, 135 and 121, also must be met before the aircraft can be certificated. These include the following:

- a. ROI Registration. A ROI. registration application must be completed and submitted, and nationality and registration markings must be applied, before a ROI. airworthiness certificate may be issued. Because these are statutory requirements, the DGCA cannot issue an exemption from this requirement. ROI. registration and evidence of deregistration from the exporting country are required prior to the issuance of a ROI. airworthiness certificate. The requirements for ROI. registration are in part 47; and aircraft nationality and registration markings are in part 45, subpart C.
- b. Product Identification. Prior to the issuance of a ROI. airworthiness certificate, the aircraft must have an ID plate in accordance with 21.182, and must meet the requirements of part 45, subpart B, Identification of Aircraft and Related Products.
- c. Noise and Emissions Requirements. In addition to meeting the airworthiness standards, an aircraft must meet the noise standards of sec. 21.93(b), 21.183(e), or 21.185(d); or part 36, or part 91, subpart I, Operating Noise Limits, as applicable.
- d. Approved Flight Manuals, Markings, and Placards. The aircraft must be accompanied by an approved flight manual in the English language as identified on the DGCA TCDS. Also, the aircraft must have the flight manual, the appropriate markings and placards in the English language as specified in the DGCA TCDS, or other approved data as required by 91.9.
- e. Logbooks and Maintenance Records. Aircraft must be accompanied by the logbooks and maintenance records as specified in sec. 91.417 to determine the status of required inspections, life limits, and AD compliance for the airframe, engine(s), propeller(s), rotor(s), and appliances of an aircraft.
- f. Aircraft Location. A ROI. airworthiness certificate will not be issued to an aircraft located outside the ROI, unless the DGCA finds no undue burden in administering the applicable regulations. Procedures have been established to use the services of the CAA of the State of Manufacture. For issuance of a ROI. standard airworthiness certificate for new aircraft manufactured outside the ROI, see appendix A to this SI.

604. APPLICATION.

- a. Application for a ROI. airworthiness certificate must be made on DAAO Form No. 21-21 by the registered owner, or an agent who has a letter of authorization from the registered owner and an operator.
- b. When the applicant has completed and signed the application, it should be submitted to the DGCA.
- c. Approved flight manuals, logbooks, and maintenance records will be made available for examination by the DGCA, upon request.

605. AIRWORTHINESS DETERMINATION.

- a. In all cases, the DGCA is required to make a finding that the aircraft conforms to a DGCA-approved TC and that it is in a condition for safe operation before the DGCA issues an airworthiness certificate for that aircraft. The DGCA may base its findings, wholly or partially, on the export certification document (for example, an Export C of A) issued by the CAA of another country, provided a bilateral agreement exists that covers the aircraft type (for example, rotorcraft).
- b. Sections 21.183(c) and 21.185(c) provide that an import aircraft type-certificated under the procedures of Part 21 sec. 21.29 is entitled to a ROI airworthiness certificate (standard or special) if the CAA of the country of manufacture certifies, and the DGCA finds, that the aircraft conforms to its approved TC and is found to be in a condition for safe operation.
- c. A CAA certification must be made by issuance of an export certification document that contains the certification statement noted on the corresponding DGCA TCDS, or that certifies that the aircraft meets its DGCA-approved type design and is in a condition for safe operation.
- d. Applicants should be cautioned that it may be impracticable to obtain a ROI. airworthiness certificate for an aircraft operated under the registry of another country subsequent to the issuance of an Export C of A by the CAA of the country of manufacture. This includes ROI.- manufactured aircraft being returned to the ROI register. Applicants must be able to identify repairs and modifications to the aircraft from the date the export certificate was issued until the date of application for the airworthiness certificate, as well as be able to document the equipment installed and any maintenance accomplished during that period. The applicant must show that the aircraft has remained in or has been returned to its DGCA approved TC and is in a condition for safe operation. This may involve extensive inspections accomplished by designees, the CAA of the country of manufacture, the aircraft manufacturer, repair stations, etc., before a ROI airworthiness certificate can be issued.
- e. A non-ROI manufactured aircraft originally exported to another country may have an Export C of A issued by the CAA of the country of manufacture that attests conformance to a design not approved by the DGCA. This certificate may be useful in establishing a baseline for showing conformity to the DGCA-approved design after modification. In this case, or when the Export C of A may not be available, it is helpful if the applicant obtains a statement from the CAA of the country of manufacture that certifies that when originally exported from that country, the aircraft met its DGCA-approved design and/or notes any differences between the configuration identified in their original export certification and the DGCA-approved

design. The applicant must obtain the necessary technical data needed to convert the aircraft to its DGCA-approved design configuration. This method may involve extensive inspections to be accomplished by DGCA, the CAA of the country of manufacture, the aircraft manufacturer, persons authorized under part 43, etc., before the applicant can show conformity to the DGCA-approved design. Attempts to obtain a ROI. airworthiness certificate using this method may be in vain; in some instances the applicant ultimately may be unable to obtain the desired airworthiness certificate.

- f. The DGCA normally will not issue an airworthiness certificate for an aircraft when no export certification is available. Without assurance in the form of an export certificate or a certifying statement from the CAA of the country of manufacture or the country of register, there is no practical way for an applicant to show, or for the DGCA to find, that the aircraft conforms to the DGCA-approved design and is in a condition for safe operation.
- g. Inspections by the DGCA should be conducted to determine that no changes or modifications have been made, and that the condition of the aircraft has not deteriorated subsequent to export certification by the CAA. Flight testing may be required prior to issuance of a ROI. airworthiness certificate if the aircraft has been disassembled and reassembled subsequent to export certification by the CAA.
- h. When an imported product's export certification document lists exceptions to the DGCA type design (for example, modifications, alterations, and major repairs that have had no prior DGCA approval), the importer must resolve the exceptions before final airworthiness certification by either having the exceptions formally approved by the DGCA or removing the nonconforming items to establish full conformity to the DGCA type design. All exceptions on imported aircraft for which the importer is seeking a standard airworthiness certificate, or a special airworthiness certificate in the restricted category, as applicable, must be resolved by the applicant before final airworthiness certification.

606. RESERVED.

607. CERTIFICATION PROCEDURES.

The procedures identified above generally are common to issuance of all classifications of airworthiness certificates and are consistent with the procedures identified in chapters 3 and 4 of this Staff Instruction.

608-609. RESERVED.

SECTION 3. AIRCRAFT ENGINES, PROPELLERS AND ARTICLES

610. AIRWORTHINESS DETERMINATION.

- a. CASR part 21 sec. 21.500 provides for the acceptance of any foreign-manufactured engine or propeller for which type certificate has been issued. These products are considered approved for installation on a ROI.-registered aircraft when a current Export Airworthiness Approval has been issued by the CAA of the country of manufacture. The Export Airworthiness certifies that the engine or propeller:
 - (1) Conforms to the R.I.-approved type design and is in a condition for safe operation
 - (2) Has been subjected to a final operational check by the manufacturer.
- b. The ROI has bilateral airworthiness agreements with certain countries which provide for the import of products from a country, other than the country of manufacture. In these instances, the applicant for a ROI airworthiness approval may show compliance with the requirements of CASR 21.500 by submitting a statement from the exporting country which certifies that the product conforms to the ROI type certificate and is in a proper state of airworthiness, along with a copy of the Export Airworthiness Approval issued by the country in which the product was manufactured.
- c. CASR part 21 sec 21.502 provides for the airworthiness acceptance of articles manufactured outside the ROI under the terms of the specific agreement. The ROI will consider articles imported to the ROI for installation on ROI.-registered aircraft to meet all applicable approval requirements when:
 - (1) The imported articles are covered under the scope of the agreement with that country;
 - (2) The articles are accompanied by a completed airworthiness document (for example, JAA Form One) from country's CAA;
 - (3) The airworthiness document certifies that the articles meet the requirements of CASR (for example, CASR part 21 sec. 21.29 or 21.617); and
 - (4) The airworthiness document certifies that the articles are eligible for installation on the product exported to the ROI.
- d. CASR part 21 sec. 21.617(c) addresses products that are covered by an DGCA letter of TSO design approval for imports. Neither the DGCA letter of TSO design approval, nor the Export Airworthiness Approval issued by the CAA of the country of manufacture, conveys installation approval. If not already accomplished, installation approval for a TSO product must be obtained, in a manner acceptable to the DGCA, at the time of installation. Approval for return to service must be performed by a person authorized in CASR part 43.

611. IDENTIFICATION AND MARKING.

- a. Aircraft engines or propellers to be installed on ROI.-registered aircraft must be identified in a manner specified in CASR part 45 sec. 45.11 with the information specified in sec. 45.13.
- b. Critical components to be used as spare, replacement, or modification parts on ROI.-registered aircraft, or on engines or propellers to be installed on ROI.-registered aircraft, must be identified with a part number and serial number.
- c. Articles approved by an DGCA letter of TSO design approval must be marked in accordance with part 21, subpart O, and any additional marking requirements specified in the particular TSO.
- d. Parts and materials to be used as spare, replacement, or modification parts on ROI.-registered aircraft must be identified by a part number and the manufacturer's name or trademark. The CAA's certification must contain information concerning the model designation of the DGCA type-certificated product for which the part or material is eligible for installation. Products manufactured pursuant to part 21, subpart O, are not subject to this requirement, because model eligibility is established at the time of installation.
- e. Products must be accompanied by maintenance records equivalent to those specified in CASR part 91 sec. 91.417 that reflect the status of required inspections, life limits, etc.

612. RETURN TO SERVICE.

Regardless of the existence of an export airworthiness approval, the person authorized to return to service the aircraft, airframe, engine, propeller, or article in accordance with CASR part 43 sec. 43.5 is responsible for determining that the imported product:

- a. Has not been modified, changed, or damaged subsequent to the time of export airworthiness approval.
- b. Complies with all applicable ADs issued under CASR part 39.
- c. Is installed in accordance with DGCA-approved design data.
- c. Is in a condition for safe operation.
- d. Has all of the necessary maintenance documentation available.

613. RESERVED.

CHAPTER 7. SPECIAL FLIGHT AUTHORIZATIONS (SFA) FOR FOREIGN REGISTERED CIVIL AIRCRAFT

700. GENERAL.

Foreign registered civil aircraft may be operated without airworthiness certificates required under CASR Part 91sec. 91.203 if a special flight authorization for that operation is issued under this section. Application for a special flight authorization must be made to the DGCA.

The DGCA may accepted a special flight authorization for a foreign civil aircraft issued by foreign authority subject to any condition and limitations that the DGCA considers necessary for safe operation in the Republic of Indonesia airspace.

Note: A listing of ICAO member states is contained on the ICAO website.

701. ELIGIBILITY.

- a. General. CASR Part 91 sec. 91.715 is applicable to foreign registered civil aircraft that does not have a current airworthiness certificate, or an equivalent to a ROI standard airworthiness certificate, that indicates that the aircraft complies with a detailed and comprehensive airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. An SFA is required for an aircraft carrying an airworthiness certificate, flight permit, or similar document issued by the state of registry that is equivalent to a ROI special airworthiness certificate.
- b. Basic Eligibility. An SFA will be issued when the following conditions exist:
 - (1) The aircraft is registered in an ICAO member state but does not have an airworthiness certificate attesting that the aircraft complies with Annex 8 to the Convention on International Civil Aviation requirements, or it has an invalid airworthiness certificate. An aircraft with an invalid airworthiness certificate issued by the aircraft's state of registry may have been repaired, altered, or modified at a ROI located facility and requires flight testing
 - (2) Director General of Civil Aviation authorization is required and is being obtained concurrently with the SFA; the SFA should include a limitation stating that a copy of the Ministry of Transportation authorization must be carried in the aircraft when operating under the SFA.
- c. Basic Ineligibility. An SFA must not be issued when the following conditions exist: If the aircraft is of foreign military registry (non-civil) and an SFA is requested, the applicant should be referred to the Ministry of Defense and related agencies. Such aircraft may enter

the ROI only with a diplomatic clearance that would be issued solely on a government-to- government, non-commercial basis.

702. BLANKET SFA.

An SFA may be requested for an operation that will be conducted many times during a given period or for a number of aircraft engaged in the same operation, for example, a ferry flight. Therefore, a blanket SFA may be issued when deemed appropriate by DGCA. If it appears the applicant is trying to circumvent ROI registration and certification requirements, for example, experimental exhibition, the SFA should not be issued.

703. APPLICATION

a. General.

The application for an SFA may be in the form of a letter, or fax from the foreign owner/operator, or from a ROI individual or firm authorized to act on behalf of the registered owner/operator. The application should be addressed to DGCA.

b. Individual Aircraft Authorizations.

An application for an SFA must contain the following information, as applicable, and any other information deemed appropriate by the DGCA:

- (1) The name and address of the applicant, if different from that of the registered owner. If the applicant is not the registered owner, a letter from the owner appointing the applicant as agent also will be submitted.
- (2) The name and address of the registered owner of the aircraft. (3) The operating purpose for which the SFA is requested.
- (3) The type of airworthiness document, if any, issued for the aircraft by the state of registry.
- (4) Information such as total aircraft time, maintenance status, date of last inspection, type of inspection, and the name and title of the person performing the inspection. This information is necessary to establish that the requested flight(s) will not adversely affect safety.
- (5) The make, model, and serial number of the aircraft.
- (6) The assigned foreign nationality and registration marks, and a valid copy of the registration document issued by the state of registry and translated into the English language.
- (7) The base of operations for the proposed flights and the areas where the flights will be conducted.
- (8) The proposed ROI port of entry and the itinerary while operating in the ROI
- (9) For aircraft being exported, the route to the ROI border and to the ultimate destination.
- (10) Whether the aircraft is to be modified in accordance with DGCA/CAA-approved data, and will require maintenance flight testing in the ROI.
- (11) Whether the aircraft will be used as a test aircraft in the development of a DGCA/CAA approved data, and will require flight testing for the purpose of "showing compliance with the regulations."

- (12) If a damaged aircraft is involved, the operating limitations, if any, assigned by the state of registry after its inspection.
 - (13) The duration for which the SFA is requested.
- c. Blanket Authorizations.

An application for a blanket SFA should contain the following information:

- (1) The name and address of the promotion sponsor; or the name and address of the manufacturer, when the purpose is for export.
- (2) The purpose(s) for which the blanket SFA is requested and the number of signed copies required to meet operating needs.
- (3) Enough information to establish that the flights will not adversely affect safety.
- (4) For airshows, etc., the name and address of the registered owner/operator (or the pilot if not the owner), make, model, serial number, registration number, type of airworthiness certificate carried, reason why the aircraft does not comply with standard airworthiness requirements, and aircraft maintenance provisions. The listing of owners, pilots, and aircraft participating may be provided separately.
- (5) Any other information deemed appropriate by the DGCA.

704. ISSUANCE OR ACCEPTANCE

- a. General. DGCA is responsible to process SFA for the application from ROI firm or individual acting on behalf of a foreign applicant, and from foreign owner/operator.
- b. Format. The various formats shown in Figures 7-1 through 7-8 of this Staff Instruction must be followed during the preparation of an SFA.
- c. Numbering. Each SFA issued must be assigned a number beginning with "SFA 01" and subsequent. Numbering of SFA shall be entered on SFA Data Base by assign DGCA Inspector.
- d. Control. DGCA must establish a permanent file for record and must keep at least one copy of each SFA issued. This file serves as a control in assigning sequential numbers to new issuances.
- e. Aircraft Inspection. The aircraft should be inspected prior to issuance or acceptance of the SFA to ensure that it is capable of safe flight. The DGCA Inspector may make, or require the applicant to make, appropriate inspections or tests considered necessary for safety.

705. DURATION.

Discretion should be used by DGCA when determining the duration of an SFA issued or accepted for an individual aircraft. For example, if the purpose is one for which delays may be expected, such as in STC projects or extended ferry flights, DGCA may establish a longer duration than was requested to preclude the need for extensions. In general, the duration of the SFA is as requested by the applicant.

706. OPERATING LIMITATIONS

Because an SFA is issued to cover operation of an aircraft that may not meet the airworthiness standards established by ICAO, appropriate limitations must be prescribed to minimize hazards to persons or property. Certain limitations would be applicable for all SFAs issued under CASR 91.715. The special operating limitations for specific operations are not intended to be all-inclusive, and the issuing DGCA may prescribe any additional limitations deemed necessary in the interest of safety. The following provides examples of minimum and special limitations for specific operations:

a. Minimum Operating Limitations.

The following are applicable to all SFAs issued or accepted unless otherwise noted. -DGCA may prescribe additional operating restrictions and limitations necessary for safe operation. must be stated on all SFAs before the following operating limitations:

- (1) A copy of this authorization must be displayed in the aircraft when operating under the terms of this SFA.
- (2) The registration marks assigned to the aircraft by the state of registry must be displayed on the aircraft according to that country's applicable requirements.
- (3) Persons or property must not be carried for compensation or hire.
- (4) No person may be carried in this aircraft during flight unless that person is essential to the purpose of the flight and has been advised of the content of this authorization and of the airworthiness status of the aircraft.
- (5) This aircraft must be operated only by airmen holding appropriate certificates or licenses issued or validated by the DGCA or the state of registry.
- (6) All flights must be conducted in compliance with the applicable general operating and flight rules of CASR 91.711.
- (7) All flights must be conducted under VFR, day only, unless otherwise authorized (for example, IFR operations may be authorized for aircraft whose operating altitudes require IFR operations).
- (8) Except when otherwise directed by air traffic control, or in the event of an emergency, all flights must be conducted to avoid areas having heavy air traffic, cities, towns, villages, congested areas, or any other area where flights might create hazardous exposure to persons or property.
- (9) The operator of the aircraft must advise air traffic control of the nature of the flight when establishing communications.
- (10) Permission for flights over or into countries other than the ROI must be obtained by the owner/operator of the aircraft from the CAA of that country.
- (11) This authorization will remain in effect until expiration date of SFA unless superseded or cancelled

b. Damaged Aircraft. The minimum operating limitations apply to any aircraft operated under this section. Additional limitations may be prescribed as individual conditions warrant.

- (1) Aircraft located in the ROI. The determination that the aircraft has been damaged to the extent that the airworthiness certificate is invalid is the responsibility of the state of registry.

Under Annex 8 to the Convention on International Civil Aviation, the state of registry may either prohibit further flights of the aircraft until it is restored to an airworthy condition, or may prescribe limitations under which the aircraft would be safe to fly to a base, either inside or outside of the ROI where repairs can be made. The DGCA must contact the CAA of the state of registry to determine the course of action to be pursued.

- (i) If the state of registry chooses to inspect the aircraft, any limitations it prescribes must be considered special limitations and made part of the SFA in addition to all of the applicable ROI limitations.
 - (ii) In the event the state of registry requests the DGCA to inspect the aircraft on its behalf, DGCA should arrange for inspection of the aircraft. Any limitations considered necessary because of the inspection must be prescribed as special limitations in addition to the minimum limitations.
- (2) Aircraft located outside the ROI. An applicant with a foreign registered aircraft needing repair, who wants the repair to be accomplished at a manufacturer or repair facility in the ROI, may do so regardless of the country in which the damage was sustained. The state of registry remains responsible for inspection of the aircraft and for establishing any necessary special operating conditions and limitations. The responsible DGCA would issue the SFA, including any limitations provided by the state of registry. The applicant must be notified in writing that approval for flights over or into countries other than the ROI must be obtained from the CAA of the countries involved. (See Figure 7-1)
- c. Change in Nationality. This paragraph applies when the C of A for an aircraft has been invalidated by the new state of registry. If the aircraft complies with ROI and/or ICAO airworthiness requirements, except for the invalid airworthiness certificate, it may not be necessary to prescribe the limitations specified in paragraph 706a (4), (7), (8), or (9) of this order, as individual circumstances warrant. The minimum number of operating limitations must be prescribed, including a limitation establishing a flight itinerary by the most practical direct route. (See figure 7-2)
- d. ROI Manufactured Aircraft. This paragraph applies whenever the title to a ROI- manufactured aircraft passes to a foreign buyer for which no airworthiness certificate has been issued or accepted. It should be noted that a ROI-manufactured aircraft need not have a registration certificate issued or accepted by the country of the foreign buyer, but must bear the ID marks issued or accepted by the state of registry or intended registry. The procedures in this paragraph also are applicable to a foreign civil aircraft of ROI manufacture brought to the ROI for alterations that invalidate its foreign airworthiness certificate. The various purposes are described below:
- (1) Flight Testing. The DGCA must carefully evaluate the reasons why the flight test must be conducted in the ROI, the qualifications of the individual or company in the ROI who will be primarily responsible for the flight test operations, and the nature of the flight tests. The conclusions reached from that evaluation are an important factor in determining the special operating limitations that must be prescribed in addition to the

minimum limitations. The following special operating limitations generally would be applicable, but may be altered or added to as deemed appropriate:

- (i) All flight tests must be conducted in compliance with CASR 91.305. (If the flight tests involve the dropping of materials, for example, water drops to test a new forest fire suppression system, CASR 91.15 also must be cited in this limitation.)
 - (ii) Prior to conducting any flight test, contact the DGCA for any additional operating restrictions or limitations necessary for the protection of persons and property.
 - (iii) All maintenance and inspection of the aircraft must be conducted under the direct supervision of qualified personnel holding appropriate licenses issued or cancelled valid by the [insert state of registry] CAA and according to [insert state of registry] aircraft maintenance requirements.
 - (iv) Except for flight tests conducted according to the terms of this authorization, additional flights within the ROI must be limited to those necessary to proceed from [specify origin] to [insert the name of the airport or other area from which the flight test will be conducted], and return to [specify destination] by the most practical direct route except for deviations necessary to maintain VFR weather conditions.
 - (v) Permission for flights over or into countries other than the ROI must be obtained by the owner or operator of the aircraft from the CAA of that country. (See Figure 7-3).
- (2) Training of Foreign Buyers, Employees, or Designees. For operations under this purpose, all minimum operating limitations must be applied except for the limitation under paragraph 706a (7) of this Staff Instruction. In most cases, an SFA issued or accepted for this purpose would be a blanket authorization issued or accepted to an aircraft manufacturer. The following special operating limitations, in addition to the required standard limitations, are worded to indicate that more than one aircraft is involved. If an SFA under this paragraph is issued or accepted for a single aircraft, an appropriate change must be made.
- (i) Each aircraft operated for customer crew training flights must carry this SFA attached to a statement that includes the name and address of the aircraft owner, the aircraft's assigned nationality and registration marks, and the dates on which the customer crew training flights are scheduled to begin and end. This limitation applies only if a blanket authorization has been issued, and should replace the minimum operating limitation listed in paragraph 706a (1) of this Staff Instruction when deemed appropriate.
 - (ii) All customer crew training and aircraft maintenance must be conducted under the direct supervision of [insert name of manufacturer] personnel.
 - (iii) Customer crew training flights on any one aircraft must be conducted during a time interval not to exceed 30 days.
 - (iv) Before beginning customer crew training flights with any one aircraft, [insert name of manufacturer] must


submit to the DGCA the information specified in paragraph 706d(2)(a) of this Staff Instruction pertaining to that aircraft. (See Figure 7-4)

- (3) Ferrying an Aircraft for Export Delivery.
- (i) Individual Aircraft Authorizations. All minimum operating limitations must be prescribed for an aircraft operated for this purpose. However, the limitations under paragraphs 706a (4), (7), (8), and (9) of this Staff Instruction may be omitted if the aircraft has a valid DAAO Form No. 21-22 -Export C of AI with no major exceptions listed, and/or is not carrying extra fuel or navigational equipment. If temporary fuel system(s)/equipment are installed and/or the aircraft is to be operated in excess of its maximum certificated takeoff weight, the limitations in paragraph 162 of this Staff Instruction must be included as applicable. The following special limitations must be applied in all cases:
 - A. Permission for flights over or into countries other than the ROI must be obtained by the owner/operator of the aircraft from the CAA of that country.
 - B. The aircraft must be flown to the ROI border from the point of departure by the most direct route not in conflict with other operating conditions and limitations of this authorization.
 - C. The aircraft must not be operated with temporary fuel system(s) or temporary navigation equipment installed, or at a weight in excess of its maximum certificated takeoff weight, unless approved in writing by the CAA of the state of registry. (See Figure 7-5)
 - (ii) Blanket Authorization. The limitations applicable to an individual aircraft authorization generally apply to a blanket authorization. Because the manufacturer is authorized to issue or accept copies without individual FAA review, the blanket authorization must be worded so that any possible situation will be covered by each copy issued. A sample blanket authorization has been developed to show all of the operating limitations that should be prescribed. (See figure 7-6)
- e. Foreign Manufactured Aircraft. The procedures provided under paragraph 706d of this Staff Instruction also are applicable to a foreign-manufactured aircraft brought to the ROI for alterations which invalidate its airworthiness certificate.
- f. Demonstration or Test. DGCA should determine that the applicant for an SFA for demonstration has satisfied, as applicable, the items listed in CASR part 91. Persons having an interest in the demonstration, for example, customers, may be carried in an aircraft issued or accepted an SFA for demonstration, and the operating limitations must be revised accordingly. Paragraph 706d (1) of this Staff Instruction applies to testing of the aircraft or article thereof. (See Figure 7-7)
- g. Airshows. Application is made to the DGCA in which the airshow is located. Foreign- registered amateur-built experimental aircraft do not require Ministry of Transportation authorization when the purpose is

for public demonstration at an airshow in the ROI. However, in the case of an aircraft to be operated in the ROI for the purpose of demonstration at an airshow, the application may be made to the DGCA. (See Figure 7-8)

Figure 7-1

Sample SFA for the Flight of an Aircraft to a Place Where Repairs or Alterations are to be made

	<p align="center">MINISTRY OF TRANSPORTATION DIRECTORATE GENERAL OF CIVIL AVIATION DIRECTORATE OF AIRWORTHINESS AND AIRCRAFT OPERATIONS Karya Building 22nd floor Jalan Medan Merdeka Barat No. 8 Jakarta Pusat Telp. : (+62-21)3506664 – 3506665 Fax : 3506663 PO. Box 3049, Jakarta 10110 website: www.hubud.dephub.go.id; e-mail: daao_dgca@dephub.go.id</p>
<p align="center">FOREIGN REGISTERED CIVIL AIRCRAFT – SPECIAL FLIGHT AUTHORIZATION (SFA)</p>	
Authorization No.	: SFA-001
Aircraft Make	: Cessna
Aircraft Model	: C180H
Serial Number	: 108H0567
Nationality and Registration Marks	: 9V-ABC
Name and Address of Registered Owner	: Mr. Johansen, 1234 Highway Street, Singapore
<p>Pursuant to CASR 91.715, Mr. Johannesburg is hereby authorized to operate the aircraft identified above for the purpose of flying it from Pondok Cabe Airport, Indonesia to Seletar Airport, Singapore, for permanent repair of damage incurred during a landing accident at Pondok Cabe Airport, Indonesia. A representative of the CAAS has inspected the aircraft and found it safe for the intended flight provided that the airspeed does not exceed 130 knots and no passengers are carried aboard the aircraft. In consideration of the foregoing, all operations must be in accordance with the following restrictions and limitations. The DGCA may prescribe additional operating restrictions and limitations necessary for safe operation.</p>	
<p>1. A copy of this authorization must be displayed in the aircraft when operating under the terms of this SFA.</p>	


2. The identification markings assigned to the aircraft by the state of registry must be displayed on the aircraft according to that country's applicable requirements.
3. This aircraft must be operated only by airmen holding appropriate certificates or licenses issued or validated by the ROI or the state of registry.
4. All flights must be conducted in compliance with applicable general operating and flight rules of CASR 91.711.
5. All flights must be conducted under visual flight rules, day only, unless otherwise authorized.
6. Except when otherwise directed by air traffic control (ATC), or in the event of an emergency, all flights must be conducted to avoid areas having heavy air traffic, cities, towns, villages, congested areas, or any other area where flights might create hazardous exposure to persons or property.
7. Persons or property must not be carried for compensation or hire.
8. No person may be carried in this aircraft during flight unless that person is essential to the purpose of the flight and has been advised of the content of this SFA and of the airworthiness status of the aircraft.
9. All flights must be conducted at airspeeds not to exceed 130 knots.
10. Permission for flights over or into countries other than the ROI must be obtained by the owner or operator of the aircraft from the Civil Aviation Authority of that country.
11. The operator of the aircraft must advise ATC of the nature of the flight when establishing communications.
12. This SFA must remain in effect until January 1, 2015 unless superseded or cancelled.

Director General of Civil Aviation

Jakarta, 15 September 2014

Figure 7-2

Sample SFA for the Flight of an Aircraft to a New State of Registry (This Format is Generally Applicable to a Single Aircraft Authorization for Ferry Flights)


	<p style="text-align: center;">MINISTRY OF TRANSPORTATION DIRECTORATE GENERAL OF CIVIL AVIATION DIRECTORATE OF AIRWORTHINESS AND AIRCRAFT OPERATIONS Karya Building 22nd floor Jalan Medan Merdeka Barat No. 8 Jakarta Pusat Telp. : (+62-21)3506664 – 3506665 Fax : 3506663 PO. Box 3049, Jakarta 10110 website: www.hubud.dephub.go.id; e-mail: daao_dgca@dephub.go.id</p>
FOREIGN REGISTERED CIVIL AIRCRAFT – SPECIAL FLIGHT AUTHORIZATION (SFA)	
Authorization No.	: SFA-002
Aircraft Make	: Cessna
Aircraft Model	: C208
Serial Number	: 2081234
Nationality and Registration Marks	: B-0012
Name and Address of Registered Owner	: Mr. Michael Cho, Taipei, Taiwan
<p>Pursuant to Title CASR 91.715, Mr. Michael Cho is hereby authorized to operate the aircraft identified above for the purpose of flying from Pondok Cabe Airport to Taoyuan Airport, Taiwan, the aircraft identified above was under Philippine registry and held a current and valid Philippine airworthiness certificate before its sale to Mr. Michael Cho. A current and valid Taiwan airworthiness certificate will not be issued until after its entry into Taiwan. In consideration of the foregoing, all operations of the aircraft must be in accordance with the following restrictions and limitations. The DGCA may prescribe additional operating restrictions and limitations necessary for safe operation.</p>	
<ol style="list-style-type: none">1. A copy of this authorization must be displayed in the aircraft when operating under the terms of this SFA.2. The identification markings assigned to the aircraft by the state of registry must be displayed on the aircraft according to that country's applicable requirements.	

3. Persons or property must not be carried for compensation or hire.
4. This aircraft must be operated only by airmen holding appropriate certificates or licenses issued or validated by the ROI or the state of registry.
5. All flights must be conducted in compliance with the applicable general operating and flight rules CASR 91.711.
6. Permission for flights over or into countries other than the ROI must be obtained by the owner or operator of the aircraft from the Civil Aviation Authority of that country.
7. Flights to the ROI border from the point of departure must be by the most practical direct route not in conflict with other operating limitations of this SFA.
8. This SFA must remain in effect until January 1, 2015 or unless superseded or rescinded.

Director General of Civil Aviation

Jakarta, 15 September 2014

Figure 7-3
Sample SFA for the Purpose of Flight Testing


	<p>MINISTRY OF TRANSPORTATION DIRECTORATE GENERAL OF CIVIL AVIATION DIRECTORATE OF AIR WORTHINESS AND AIRCRAFT OPERATIONS Karya Building 22nd floor Jalan Medan Merdeka Barat No. 8 Jakarta Pusat Telp. : (+62-21)3506664 – 3506665 Fax : 3506663 PO. Box 3049, Jakarta 10110 website: www.hubud.dephub.go.id; e-mail: daao_dgca@dephub.go.id</p>
<p>FOREIGN REGISTERED CIVIL AIRCRAFT – SPECIAL FLIGHT AUTHORIZATION (SFA)</p>	
Authorization No.	: SFA-003
Aircraft Make	: CASA
Aircraft Model	: C212-200
Serial Number	: 502-0599
Nationality and Registration Marks	: VH-ABC
Name and Address of Registered Owner	: Air Australia, Perth, Australia
Name and Address of Agent	: BPPT
	Jalan MH. Thamrin no.102, Jakarta 10110
<p>Pursuant to CASR 91.715, BPPT is hereby authorized to operate the aircraft identified above for the purpose of conducting flight test(s) required to obtain a Supplemental Type Certificate (STC) covering the installation in the aircraft of rain making spraying. All operations of the aircraft must be in accordance with the following restrictions and limitations. The DGCA may prescribe additional operating restrictions and limitations necessary for safe operations.</p>	
<ol style="list-style-type: none"> 1. A copy of this authorization must be displayed in the aircraft at all times when operating under the terms of this SFA. 2. The identification markings assigned to the aircraft by the state of registry must be displayed on the aircraft according to that country's applicable requirements. 	

3. **Persons or property must not be carried for compensation or hire.**
4. **No person may be carried in the aircraft during flight unless that person is essential to the purpose of the flight and has been advised of the contents of this SFA and of the airworthiness status of the aircraft.**
5. **The aircraft must be operated only by airmen holding appropriate certificates or licenses issued or validated by the ROI or the state of registry. The pilot in command of this aircraft must hold an appropriate category/class rating. If required for the type of aircraft to be flown, the pilot in command must also hold either an appropriate type rating or a letter of authorization issued by an DGCA Inspector, or equivalent issued or validated by the state of registry.**
6. **All flights must be conducted in compliance with the applicable general operating and flight rules of CASR 91.711.**
7. **All flight tests must be conducted in compliance with CASR 91.305.**
8. **All flights must be conducted under visual flight rules, day only, unless otherwise authorized.**
9. **Except when otherwise directed by air traffic control (ATC), or in the event of an emergency, all flights must be conducted to avoid areas having heavy air traffic, cities, towns, villages, congested areas, or any other area where flights might create hazardous exposure to persons or property.**
10. **Prior to conducting any flight test, contact the DGCA for any additional operating restrictions or limitations necessary for the protection of persons or property.**
11. **All maintenance and inspection of the aircraft must be conducted under the direct supervision of qualified personnel holding appropriate licenses issued or rendered valid by the CASA and according to Australian aircraft maintenance requirements.**
12. **Permission for flights over or into countries other than ROI must be obtained by the owner or operator of the aircraft from the Civil Aviation Authority of that country.**
13. **The operator of the aircraft must advise ATC of the nature of the flight when establishing communications.**
14. **This SFA must remain in effect until January 1, 2015, or unless superseded or cancelled.**

Director General of Civil Aviation

Jakarta, 15 September 2014

Figure 7-4
Sample Blanket SFA for Customer Crew Training


	<p style="text-align: center;">MINISTRY OF TRANSPORTATION DIRECTORATE GENERAL OF CIVIL AVIATION DIRECTORATE OF AIRWORTHINESS AND AIRCRAFT OPERATIONS Karya Building 22nd floor Jalan Medan Merdeka Barat No. 8 Jakarta Pusat Telp. : (+62-21)3506664 – 3506665 Fax : 3506663 PO. Box 3049, Jakarta 10110 website: www.hbud.dephub.go.id; e-mail: daao_dgca@dephub.go.id</p>
FOREIGN CIVIL AIRCRAFT SPECIAL FLIGHT AUTHORIZATION (SFA)	
<p>Authorization No.: <u>SFA-004</u></p>	
<p>Pursuant to CASR 91.715 to the PT. DI, Jl. Pajajaran No. 154 Bandung, Jawa Barat, Indonesia, this constitutes authority in lieu of an airworthiness certificate. For the purpose of giving customer crew training to the buyer, its employees, or designees in any aircraft manufactured by the PT. DI when the aircraft has been placed under Foreign Registry, each aircraft operated under this SFA must be operated according to the following restrictions and limitations. The DGCA may prescribe operating restrictions and limitations necessary for safe operation.</p>	
<ol style="list-style-type: none">1. Each aircraft operated for customer crew training flights must carry this SFA attached with a statement including the name and address of the aircraft owner, the aircraft's assigned nationality and registration marks, and the dates on which the customer crew training flights are scheduled to begin and end.2. All customer crew training and aircraft maintenance must be conducted under the direct supervision of qualified PT. DI personnel.3. Customer crew training flights on any one aircraft must be conducted during an interval not to exceed 30 days.4. Before beginning customer crew training flights with any one aircraft, the PT. DI must submit to the DGCA the information specified in number 1 of this authorization pertaining to that aircraft.5. The identification markings assigned to the aircraft by the state of registry must be displayed on the aircraft according to that country's applicable requirements.6. Persons or property must not be carried for compensation or hire.7. No person may be carried in the aircraft during flight unless that person is essential to the purpose of the flight and has been advised of the contents of this SFA and of the airworthiness status of the aircraft.	

8. This aircraft must be operated only by airmen holding appropriate certificates or licenses issued or validated by the DGCA or the state of registry.
9. All flights must be conducted in compliance with the applicable general operating and flight rules of CASR 91.711.
10. Except when otherwise directed by air traffic control (ATC), or in the event of an emergency, all flights must be conducted to avoid areas having heavy air traffic, cities, towns, villages, congested areas, or any other area where flights might create hazardous exposure to persons or property.
11. The operator of the aircraft must advise ATC of the nature of the flight when establishing communications.
12. Permission for flights over or into countries other than the ROI must be obtained by the owner or operator of the aircraft from the CAA of that country.
13. This SFA must remain in effect indefinitely unless superseded or cancelled.

Director General of Civil Aviation

Jakarta, 15 September 2014

Figure 7-5
Sample SFA for Export Delivery

	<p style="text-align: center;">MINISTRY OF TRANSPORTATION DIRECTORATE GENERAL OF CIVIL AVIATION DIRECTORATE OF AIRWORTHINESS AND AIRCRAFT OPERATIONS Karya Building 22nd floor Jalan Medan Merdeka Barat No. 8 Jakarta Pusat Telp. : (+62-21)3506664 – 3506665 Fax : 3506663 PO. Box 3049, Jakarta 10110 website: www.hbud.dephub.go.id; e-mail: daao_dgca@dephub.go.id</p>
FOREIGN REGISTERED CIVIL AIRCRAFT SPECIAL FLIGHT AUTHORIZATION (SFA)	
Authorization No.	: SFA-005
Aircraft Make	: CASA
Aircraft Model	: C212-100
Serial Number	: 212-0021
Nationality and Registration Marks	: 9V-ABC
Name and Address of Registered Owner	: Mr. Richard Woo, Paya Road 101 Singapore
<p>Pursuant to CASR 91.715, Mr. Richard Woo is hereby authorized to operate the aircraft identified above for the purpose of export and delivery from Bandung, Indonesia to Singapore. This aircraft is on Singapore registry and an airworthiness certificate has not yet been issued. The DGCA may prescribe additional operating restrictions and limitations necessary for safe operation.</p>	
<ol style="list-style-type: none">1. A copy of this authorization must be displayed in the aircraft when operating under the terms of this SFA.2. The identification markings assigned to the aircraft by the state of registry must be displayed on the aircraft according to that country's applicable requirements.3. No person may be carried in this aircraft during flight unless that person is essential to the purpose of the flight and has been advised of the content of this SFA and of the airworthiness status of the aircraft.	

4. The aircraft must not be operated with temporary fuel system(s) or temporary navigation equipment installed or at a weight in excess of its maximum certificated takeoff weight, unless approved, by the Civil Aviation Authority (CAA) state of registry in writing.
5. Except when otherwise directed by air traffic control (ATC), or in the event of an emergency, all flights must be conducted to avoid areas having heavy air traffic, cities, towns, villages, congested areas, or any other areas where the flights might create hazardous exposure to persons or property.
6. This aircraft must be operated only by airmen holding appropriate certificates or licenses issued or validated by the DGCA or state of registry.
7. All flights must be conducted in compliance with the applicable general operating and flight CASR 91.711.
8. All flights must be conducted under visual flight rules, day only, unless otherwise authorized.
9. Permission for flights over or into countries other than the ROI must be obtained by the owner or operator of the aircraft from the CAA of that country.
10. The aircraft must be flown to the ROI border from the point of departure by the most practical direct route not in conflict with the other operating conditions and limitations of this SFA.
11. Persons or property must not be carried for compensation or hire.
12. The operator of the aircraft must advise ATC of the nature of the flight when establishing communications.
13. This SFA must remain in effect until January 1, 2015, unless superseded or cancelled.

Director General of Civil Aviation

Jakarta, 15 September 2014

Figure 7-6
Sample Blanket SFA for Delivering Aircraft for the Purpose of Export Delivery



MINISTRY OF TRANSPORTATION
DIRECTORATE GENERAL OF CIVIL AVIATION
DIRECTORATE OF AIRWORTHINESS AND AIRCRAFT OPERATIONS

Karya Building 22nd floor
Jalan Medan Merdeka Barat No. 8 Jakarta Pusat
Telp. : (+62-21)3506664 – 3506665 Fax : 3506663
PO. Box 3049, Jakarta 10110
website: www.hubud.dephub.go.id; e-mail: daao_dgca@dephub.go.id

FOREIGN CIVIL AIRCRAFT SPECIAL FLIGHT AUTHORIZATION (SFA)

Authorization No.: SFA-006

This SFA is issued to PT. DI, Jl. Padjajaran No. 154 Bandung, Jawa Barat, Indonesia, pursuant to CASR 91.715. A copy of this SFA furnished by the above constitutes authority in lieu of an airworthiness certificate for the purpose of export delivery of aircraft manufactured by that Company. This SFA is applicable to aircraft that are on a foreign registry and have no airworthiness certificate. The DGCA may prescribe additional operating restrictions and limitations necessary for safe operation.

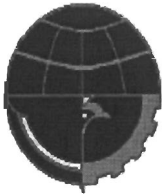
1. A copy of this authorization must be displayed in the aircraft when operating under the terms of this SFA.
2. No person may be carried in this aircraft during flight unless that person is essential to the purpose of the flight and has been advised of the content of this SFA and of the airworthiness status of the aircraft.
3. The identification markings assigned to the aircraft by the state of registry must be displayed on the aircraft according to that country's applicable requirements.
4. The aircraft must not be operated with temporary fuel system(s) or temporary equipment installed, or at a weight in excess of its maximum certificated takeoff weight, unless approved by the Civil Aviation Authority (CAA) of the state of registry in writing.
5. Persons or property may not be carried in the aircraft for compensation or hire.
6. The aircraft must be flown to the ROI border from the point of departure by the most direct route not in conflict with the other operating conditions and limitations of this SFA.
7. Permission for flights over or into countries other than ROI must be obtained by the owner or operator of the aircraft from the CAA of that country.
8. The aircraft must be operated according to the applicable general operating and flight rules of CASR 91.711.

9. This aircraft must be operated only by airmen holding appropriate certificates or licenses issued or validated by the DGCA or the state of registry.
10. All flights must be conducted under visual flight rules, day only, unless otherwise authorized.
11. Except when otherwise directed by air traffic control (ATC), or in the event of an emergency, all flights must be conducted to avoid areas having heavy air traffic, cities, towns, villages, congested areas, or any other areas where the flights might create hazardous exposure to persons or property.
12. The operator of the aircraft must advise ATC of the nature of the flight when establishing communications.
13. This SFA must remain in effect until January 1, 2015.

Director General of Civil Aviation

Jakarta, 15 September 2014

Figure 7-7
 Sample SFA for the Purpose of Demonstration


	<p>MINISTRY OF TRANSPORTATION DIRECTORATE GENERAL OF CIVIL AVIATION DIRECTORATE OF AIRWORTHINESS AND AIRCRAFT OPERATIONS Karya Building 22nd floor Jalan Medan Merdeka Barat No. 8 Jakarta Pusat Telp. : (+62-21)3506664 – 3506665 Fax : 3506663 PO. Box 3049, Jakarta 10110 website: www.hubud.dephub.go.id; e-mail: daao_dgca@dephub.go.id</p>
<p>FOREIGN REGISTERED CIVIL AIRCRAFT SPECIAL FLIGHT AUTHORIZATION (SFA)</p>	
<p>Authorization No.</p>	<p>: SFA-007</p>
<p>Aircraft Make</p>	<p>: EMBRAER</p>
<p>Aircraft Model</p>	<p>: EMB 135 BJ</p>
<p>Serial Number</p>	<p>: 1450</p>
<p>Nationality and Registration Marks</p>	<p>: PT-ABC</p>
<p>Name and Address of Registered Owner</p>	<p>: Embraer, Av. Brig. Faria Lima, 2170, Sao Jose Dos Campos, SP Brazil</p>
<p>Pursuant to CASR 91.715, Embraer Brazil is hereby authorized to operate the aircraft identified above for the purpose of conducting demonstration flights in the ROI. The aircraft has been issued a provisional certificate of airworthiness by the ANAC - Agência Nacional de Aviação Civil - Brasil and has been shown to meet standards equivalent to those required for provisional certification of a for ROI registered civil aircraft. All operations of the aircraft must be in accordance with the following restrictions and limitations. The DGCA may prescribe additional operating restrictions and limitations necessary for safe operation.</p>	
<ol style="list-style-type: none"> 1. A copy of this SFA must be displayed in the aircraft when operating under the terms of this SFA. 2. The identification markings assigned to the aircraft by the state of registry must be displayed on the aircraft according to that country's applicable requirements. 3. Persons or property must not be carried for compensation or hire. 	

4. No person may be carried in this aircraft during flight unless that person is essential to the purpose of the flight and has been advised of the content of this SFA and of the airworthiness status of the aircraft.
5. The aircraft must be operated only by airmen holding appropriate certificates or licenses issued or validated by the DGCA or the state of registry. The pilot in command of this aircraft must hold an appropriate category/class rating. If required for the type of aircraft to be flown, the pilot in command must also hold either an appropriate type rating or a letter of authorization issued by DGCA, or equivalent issued or validated by the state of registry.
6. All flights must be conducted in compliance with the applicable general operating and flight rules of CASR 91.711.
7. All flights must be conducted under visual flight rules, day only, unless otherwise authorized.
8. Except when otherwise directed by air traffic control (ATC), or in the event of an emergency, all flights must be conducted to avoid areas having heavy air traffic, cities, towns, villages, congested areas or any other area where flights might create hazardous exposure to persons or property.
9. Prior to conducting any demonstration flight, contact the DGCA for any additional operating restrictions or limitations necessary for the protection of persons and property.
10. Permission for flights over or into countries other than the ROI must be obtained by the owner or operator of the aircraft from the CAA of that country.
11. The operator of the aircraft must advise ATC of the nature of the flight when establishing communications.
12. This SFA must remain in effect until January 1, 2015 unless superseded or rescinded.

Director General of Civil Aviation

Jakarta, 15 September 2014

Figure 7-8
 Sample SFA for Singapore-Registered Amateur-Built Aircraft
 (Example: Authorization for the Purpose of Attending an Airshow)

	<p align="center">MINISTRY OF TRANSPORTATION DIRECTORATE GENERAL OF CIVIL AVIATION DIRECTORATE OF AIRWORTHINESS AND AIRCRAFT OPERATIONS Karya Building 22nd floor Jalan Medan Merdeka Barat No. 8 Jakarta Pusat Telp. : (+62-21)3506664 – 3506665 Fax : 3506663 PO. Box 3049, Jakarta 10110 website: www.hubud.dephub.go.id; e-mail: daao_dgca@dephub.go.id</p>
<p align="center">FOREIGN REGISTERED CIVIL AIRCRAFT SPECIAL FLIGHT AUTHORIZATION (SFA)</p>	
<p>Authorization No.</p>	<p>: SFA-008</p>
<p>Aircraft Make</p>	<p>: JABIRU</p>
<p>Aircraft Model</p>	<p>: Jabiru 54000</p>
<p>Serial Number</p>	<p>: 950</p>
<p>Nationality and Registration Marks</p>	<p>: 9V-ABC</p>
<p>Name and Address of Registered Owner</p>	<p>: Mr. Igleas, Tower B, Orchard Road, Singapore</p>
<p>Name and Address of Agent</p>	<p>: Mr. Hendrik Latumena, Cikini, Jakarta</p>
<p>Pursuant to CASR 91.715, Mr. Igleas, Tower B, Orchard Road, Singapore, is hereby authorized to operate the aircraft identified above for the purpose of attending the airshow at Halim Perdanakusuma, Jakarta, November 9 through 12, 2014. The aircraft has been issued a Singapore flight permit. All operations of the aircraft must be in accordance with the following restrictions and limitations. DGCA may prescribe additional operating restrictions and limitations necessary for safe operation.</p>	
<ol style="list-style-type: none"> 1. A copy of this authorization must be displayed in the aircraft when operating under the terms of this SFA. 2. The identification markings assigned to the aircraft by the state of registry must be displayed on the aircraft according to that country's applicable requirements. 3. Persons or property must not be carried for compensation or hire on board the aircraft. 4. The aircraft must be operated under visual flight rules, day only. 	

5. Except when otherwise directed by air traffic control (ATC), or in the event of an emergency, all flights must be conducted to avoid areas having heavy air traffic, cities, towns, villages, congested areas, or any other area where the flights might create hazardous exposure to persons or property.
6. The operator of the aircraft must advise ATC of the nature of the flight when establishing.
7. The aircraft must be operated according to restrictions imposed by CAAS provided those restrictions do not limit or change the conditions herein imposed.
8. All flights must be conducted in compliance with the general operating and flight rules of CASR 91.711.
9. No person may be carried in this aircraft during flight unless that person is essential to the purpose of the flight and has been advised of the content of this SFA and of the airworthiness status of the aircraft.
10. The aircraft must be operated only by airmen holding appropriate certificates or licenses issued or validated by the ROI or the state of registry. The pilot in command of this aircraft must hold an appropriate category/class rating. If required for the type of aircraft to be flown, the pilot in command must also hold either an appropriate type rating or a letter of authorization issued by an DGCA, or equivalent issued or validated by the state of registry.
11. This SFA must remain in effect until January 1, 2015 unless superseded or rescinded.

Director General of Civil Aviation

Jakarta, 15 September 2014

CHAPTER 8. PROCESSING FORMS, REPORTS, AND CERTIFICATION FILES

800. GENERAL.

- a. This chapter describes the requirements associated with the various forms used for domestic certification and their processing. All information entered on these documents should be typewritten whenever possible. **THE USE OF PENCIL, ERASURES, STRIKEOVERS, ETC., IS NOT PERMITTED.** Mistakes on application forms, submitted by an applicant, may be corrected by the applicant, provided that the applicant or the representative making the correction places his initials beside the area of correction.
- b. All information inserted on DGCA certificates, will be typewritten. The signature must be made in "permanent type" ink only on the original and all copies. The use of ballpoint pen with permanent type ink is acceptable. When the reverse side of a certificate is used, the statement "See Reverse Side" should be typed on the face of the certificate. The end of information on the reverse side of a certificate should be indicated by a line across the certificate together with the word "end".

801. REVIEW AND COMPLETION of DAAO FORM NO. 21-21.

This form is required whenever an airworthiness certificate is issued or amended. This includes changes to operating limitations which may have been prescribed; for example, amending operating limitations for an amateur-built aircraft to permit operation outside of an assigned flight test area.

- a. The applicant or authorized agent must complete the following sections:

Note: An authorized agent is someone who has a notarized LOA from the registered owner.

- (1) For a standard airworthiness certificate, complete sections I, II, and III. Also, complete section IV if the application is for a standard airworthiness certificate:
 - (i) In accordance with CASR part 21 sec. 21.183(d), or
 - (ii) In accordance with CASR part 21 sec. 21.183(h) and 21.6(b)).
- (2) For a special airworthiness certificate, complete sections I, II, and III.
- (3) For a special flight permit only, complete—
 - (i) Sections II, and VI for production flight testing; or
 - (ii) Sections II, and VII for purposes other than production flight testing.
 - (iii) For production flight testing of light-sport category aircraft, complete sections I and II, and items A and C of section VI.
- (4) For unmanned aircraft, complete sections I, II, and III (blocks A, B (when applicable), C, and D).

b. Instruction for Verifying Applicant's Entries and Completing DAAO FORM NO. 21-21.

- (1) Section I. Aircraft Description. The DGCA must verify the applicant's entries from the aircraft registration certificate or aircraft identification plate, as applicable. If any block under this section is not applicable, enter N/A.

Note: This section is completed when an application is being made for a special flight permit for production flight testing of light-sport category aircraft.

- (i) Registration Mark. The ROI, nationality designator (the letter "PK") followed by the registration marks as shown on the aircraft registration certificate is entered.
- (ii) Aircraft Builder's Name (Make). The name of the manufacturer or builder as it appears on the aircraft identification plate in accordance with CASR part 45 sec. 45.13(a)(1) is entered.
- A. For amateur-built aircraft built from a kit, the aircraft builder is the name of the previously designated kit and the builder, e.g., "Bensen-Smith". When two or more persons are involved, enter only the name of the individual that appears first on the certificate of aircraft registration.
- B. For LSA assembled from an LSA manufacturer's kit, the builder's name is that of the manufacturer.
- C. For aircraft built from spare and/or surplus articles, the builder's name is the person who assembled the aircraft, not the TC owner/manufacturer who builds the same model of aircraft. When two or more persons are involved, only the name of the individual listed first on the aircraft ID plate is entered.
- D. For unmanned aircraft, the builder's name is the manufacturer's company name.
- (iii) Aircraft Model Designation. The model designation as shown on the aircraft identification plate in accordance with CASR part 45 sec. 45.13(a)(2) is entered. (Trade names should not be used.)
- A. If the application is for a surplus military aircraft, the civil model designation is entered and the military model designation is entered in parentheses. When the civil model is unavailable from the data plate, refer to the aircraft type certificate data.
- B. For aircraft built from spare and/or surplus articles, the model designation is the aircraft type design to which the applicant shows conformity.
- C. For surplus ROI military aircraft type certificated under CASR part 21 sec. 21.25(a)(2) in the restricted category, only the military designation will be used.
- D. For amateur-built aircraft, the model may be any arbitrary designation as selected by the builder. If the aircraft was purchased as a kit, the model designation assigned by the kit manufacturer should be used.

- E. For unmanned aircraft, the model may be any designation selected by the manufacturer.
- (iv) Year of Manufacture. The year of manufacture if shown on the aircraft ID plate or as reflected in the aircraft's records is entered.
 - A. For aircraft eligible for standard airworthiness certificates, the year of manufacture is the date (entered by the manufacturer) in the inspection records that reflect when the aircraft was completed and met the DGCA-approved type design data.
 - B. For aircraft other than those in paragraph 801b(1)(d)1 of this order, the year of manufacture is the date entered by the builder in the inspection records or logbook establishing evidence that the aircraft is airworthy and eligible for the requested certificate.
 - C. For LSA, the year of manufacture is the date entered by the manufacturer in the SOC or by the builder in the inspection records or logbook establishing evidence that the aircraft is eligible for the requested certificate.
- (v) Aircraft Serial Number. The serial number as shown on the aircraft ID plate in accordance with CASR part 45 sec. 45.13(a)(3) is entered.
 - A. For surplus ROI military aircraft, the manufacturer's civil serial number. The military serial number must be placed in parentheses following the civil serial number. If no civil serial number exists, the military number is used.
 - B. For aircraft built from spare and/or surplus articles, the serial number may be assigned by the builder. That number should not be confused with the serial number assigned by an original manufacturer who builds the same type of aircraft under a PC. It is suggested that a letter prefix or suffix, such as the builder's name or initials, be used with the serial number to provide for positive ID.
 - C. For amateur-built aircraft, fabricated and assembled from plans or the builder's own design, the serial number may be any arbitrary number assigned by the builder. For any aircraft fabricated and assembled from a kit, the aircraft should be identified by the serial number assigned by the kit manufacturer or supplier.
- (vi) Year of Manufacture. Self-explanatory
- (vii) Engine Builder's Name (Make). For Type Certificated engines, the engine make is the name of the manufacturer as it appears on the engine ID plate in accordance with CASR part 45 sec. 45.13(a)(1). Abbreviations may be used, for example, "P&W," "GE," "CMC," etc. For non-TC engines, enter the engine manufacturer's name as it is known. "N/A" is entered when no engines are installed, as in the case of the glider or balloon.
- (viii) Engine Model Designation. The complete designation as shown on the engine ID plate is entered; for example, "O-320-A1B," "PT6A-20A," or "CFM-56-3C-1," in

accordance with CASR part 45 sec. 45.13(a)(2). For non-TC engines, enter the engine manufacturer's engine model designation as it is known. Enter "N/A" for aircraft with no engines.

- (ix) Number of Engines. When applicable, the number of engines installed on the aircraft is entered.
 - (x) Propeller Builder's Name (Make). The name of the manufacturer as shown on the propeller identification marking is entered. "N/A" is entered if propellers are not installed. (See CASR part 45 sec. 45.13(a)(1)).
 - (xi) Propeller Model Designation. The model designation as shown on the propeller identification marking is entered. Enter "N/A" for aircraft with no propellers.
 - (xii) Aircraft Is Import. This block must be checked only if the aircraft was manufactured outside the ROI and certificated under CASR part 21 sec. 21.29, and the applicant is seeking airworthiness certification under CASR part 21 sec. 21.183(c).
- (2) Section II. Certification Requested. The following paragraphs list the applicable CASR references for standard and special airworthiness certificates and aid in the completion of DAAO Form No. 21-21.
- (i) Item A. Standard Airworthiness Certificate. This certificate is issued to type-certificated aircraft in the normal, utility, acrobatic, transport, commuter, and manned free balloon categories; and for special classes of aircraft. Special class aircraft include gliders, airships, and other non-conventional aircraft. Special class application would be indicated by marking the "Standard" and other blocks (section II A), and entering the type, (for example, glider, VLA, airship, etc.) in the blank space directly above the category blocks. For aircraft type certificated before the adoption of categories, in the open space above the category blocks the basis is entered for certification as shown in that aircraft's aircraft listing, specification sheet, or TCDS (for example, Category "N/A"-Certification basis CASR 25). Applicable regulations are as follows:
 - A. CASR part 21 sec 21.183(a), New aircraft manufactured under a production certificate;
 - B. CASR part 21 sec 21.183(b), New aircraft manufactured under a type certificate;
 - C. CASR part 21 sec 21.183(c), Import aircraft;
 - D. CASR part 21 sec 21.183(d), Used aircraft and aircraft built from spare and surplus aircraft Military; and
 - E. CASR part 21 sec 21.183(h), New aircraft manufactured under the provisions of CASR part 21 sec 21.6(b).
 - (ii) Item B. Special Airworthiness Certificate. This certificate is issued to aircraft that do not meet the requirements for a standard airworthiness certificate. Special airworthiness certificates are identified as primary, limited, provisional, restricted, experimental, special flight permit, and light-sport. Applicable regulations are as follows:

- A. Light-Sport Airworthiness Certificate. CASR part 21 sec 21.190, Issue of airworthiness certificate for LSA category.
- B. Limited Airworthiness Certificate. CASR part 21 sec 21.189, Issue of airworthiness certificate for limited category aircraft.
- C. Provisional Airworthiness Certificate.
 - CASR part 21 sec 21.221, Class I provisional airworthiness certificates (may be issued for all categories); and
 - CASR part 21 sec 21.223, Class II provisional airworthiness certificates (transport category only).
- D. Restricted Airworthiness Certificate.
 - CASR part 21 sec 21.185(a), Aircraft manufactured under a production certificate or type certificate;
 - CASR part 21 sec 21.185(b), Other aircraft; and
 - CASR part 21 sec 21.185(c), Import aircraft (type certificate)
- E. Experimental Certificate.
 - CASR part 21 sec 21.191(a), Research and development;
 - CASR part 21 sec 21.191(b), Showing compliance with regulations;
 - CASR part 21 sec 21.191(c), Crew training;
 - CASR part 21 sec 21.191(d), Exhibition;
 - CASR part 21 sec 21.191(e), Air racing;
 - CASR part 21 sec 21.191(f), Market surveys;
 - CASR part 21 sec 21.191(g), Operating amateur-built aircraft;
 - CASR part 21 sec 21.191(h), Operating kit-built aircraft (primary category aircraft assembled by a person(s) without the supervision and quality system of the PC holder);
 - CASR part 21 sec 21.191(i), Operating LSA purpose under CASR part 21 sec 21.191(i)(1), (i)(2), or (i)(3); and
- F. Special Flight Permit.
 - CASR part 21 sec 21.197(a)(1), Flying the aircraft to a base where repairs, alterations, or maintenance are to be performed, or to a point of storage;
 - CASR part 21 sec 21.197(a)(2), Delivering or exporting the aircraft;
 - CASR part 21 sec 21.197(a)(3), Production flight testing new production aircraft;
 - CASR part 21 sec 21.197(a) (4), Evacuating aircraft from areas of impending danger;
 - CASR part 21 sec 21.197 (a)(5), Conducting customer demonstration flights in new production aircraft that have satisfactorily completed production flight tests; and
 - CASR part 21 sec 21.197(b), Operation of an aircraft at a weight in excess of its maximum certificated takeoff weight.

- (iii) Item C. Multiple Airworthiness Certificates. These certificates are issued to an applicant in the restricted category and one or more other categories except the primary category. CASR part 21 sec 21.187 identifies the requirements an applicant must comply with before multiple airworthiness certificates are issued.
- (3) Section III. Owner's Certification.

Note: This section is not completed when application is being made for a special flight permit.

- (i) Registered Owner. The name and address is entered exactly as shown on the aircraft registration certificate. CASR part 47 prescribes the requirements for registering aircraft.
- (ii) Aircraft Certification Basis (Aircraft Specification or Type Certificate Data Sheet). This item must be completed when application is being made for a standard, light-sport, provisional, limited, restricted, or multiple airworthiness certificates.
 - A. When application is being made for a multiple airworthiness certificate, the certification basis for each certificate being requested is entered.
 - B. If the TCDS or specification for a new aircraft or model has been approved, but not yet published, the date of approval, the TC or specification number, and the word "Preliminary" is entered.
 - C. When application is being made for a special airworthiness certificate in light- sport category, the applicable consensus standard for design and performance from the SOC is entered. If no SOC exists for the aircraft, enter "N/A."
 - D. "N/A" is entered when the application is being made for an experimental
 - E. Certificate.
- (iii) Airworthiness Directive (AD). This block must be completed to indicate compliance with all applicable ADs in accordance with CASR part 39 and CASR part sec. 21.99, regardless of the type of airworthiness certificate being requested and list the number of the latest AD completed for the aircraft specified in Section I, as of the date of the application form.
- (iv) Supplemental Type Certificate. This block is applicable to all standard airworthiness certifications and special airworthiness certifications in the restricted, limited, provisional categories for aircraft with one or more STCs installed, and must be filled out at the time of application. The STC number of each STC installed must be entered. An attachment may be used if more space is required by the applicant.

Note: "N/A" is entered when the application is being made for a special airworthiness certificate in experimental or light-sport categories.

- (v) Aircraft Operation and Maintenance Records.

- A. Check If Records Are in Compliance With CASR part 91 sec. 91.417. This block applies to all aircraft covered by this section and must be checked to indicate that the recordkeeping requirements of CASR part 91 sec. 91.417 have been met. For example, to comply with CASR part 91 sec. 91.417(a)(2)(i), the aircraft maintenance record must include the total time-in-service of the airframe, engines, propellers, and rotor; and to comply with CASR part 91 sec. 91.417(a)(2)(ii), the record must include the current status of the life-limited articles of the airframe, engines, propellers, rotor, appliances, and articles. All record entries must be in English.
 - B. Total Airframe Hours. This block applies to all aircraft covered by this section. The total time-in-service of the aircraft, including production flight test time, should be entered.
 - C. Experimental Only. When submitting an application for the renewal of an experimental certificate, when requesting a change back to a standard certificate, or when requesting a change back to special LSA category certificate, the hours flown since the previous certificate was issued or renewed must be entered. If the application is for an original issuance of an experimental certificate and the aircraft has no previous operating time, "0" is entered.
- (vi) Certification. If the signature is by the owner's agent, a notarized letter from the registered owner authorizing the agent to act on the owner's behalf is required.
- (4) Section IV. Inspection Agency Verification. This section should be appropriately completed only if the applicant is being made for a standard airworthiness certificate in accordance with CASR 21.183(d). This section should be left blank for all other certification actions.

Note: CASR part 21 sec. 21.183(d)(2) states that an experimentally certificated aircraft that previously had been issued a different airworthiness certificate under CASR part 21 sec.21.183, and is being returned to the standard airworthiness category, is exempt from the 100-hour inspection set forth in CASR part 43 sec.43.15.

- (5) Section V. DGCA Certification. This section must be completed, and signed only by DGCA authorized to issue airworthiness certificates. Check the block(s) applicable to the certification action involved.
- (i) Amendment of its Current Airworthiness Certificate. Applicable to recurrent airworthiness certification and for amending experimental or provisional airworthiness certificates, including operating limitations, if applicable.
 - (ii) Stamp Number. The assigned DGCA inspector should enter his Stamp number designation.
 - (iii) DGCA Inspector's Signature. The DGCA inspector's signature will be signed in ink over his typed name on the original and copies.

- (6) Section VI. Production Flight Testing. This section should be completed ONLY by a manufacturer applying for a special flight permit for the purpose of production flight testing aircraft under the provisions of CASR part 21 sec. 21.197(a)(3). All required entries are self-explanatory.

Note: The requirements in this section for LSA production flight testing are only items A and C, with item B remaining blank.

- (7) Section VII. Special Flight Permit Purpose Other than Production Flight Test. The applicant should complete all items under this section as follows:
- (i) Item A. Description of Aircraft. The entries in the blocks under this section should be the same as the certificate of aircraft registration and, as applicable, on the aircraft ID plate.
 - (ii) Item B. Description of Flight. The present location of the aircraft is entered in the "From" box and the aircraft's intended destination in the "To" box.
 - A. The "via" block should contain the name of an airport or city at some intermediate point in the flight to provide a general description of the route to be flown. A flight from Ujung Pandang to Jakarta may, for example, be via Surabaya, or Denpasar, to name a few of the alternatives.
 - B. The "duration" entry should reflect the overall duration of the special flight permit and need not be the same as the planned duration of the actual flight. Factors such as fueling stops, weather conditions, overnight stops, or any other reasonable conditions should be given consideration in establishing the duration, to preclude the need for reissuance of the permit in the event of unforeseen delays. If necessary, the DGCA should give counsel and advice to the applicant to enable establishment of a reasonable duration.
 - (iii) Item D. The Aircraft does not meet the Applicable Airworthiness Requirements as Follows. This entry should state in detail the ways, if any, in which the aircraft does not comply with the applicable airworthiness requirements in accordance with CASR part 21 sec. 21.199(a)(4).
 - (iv) Item E. The Following Restrictions Are Considered Necessary for Safe Operation. This entry should state in detail the restrictions he considers necessary for safe operation of the aircraft; for example, reduced airspeed or weights, turbulence avoidance, crew limitations or qualifications, and the like. This item should be carefully reviewed by the DGCA to determine that the restriction would ensure safe operation of the aircraft, and any deficiencies should be resolved prior to issuance of the special flight permit. The DGCA may also prescribe additional conditions and limitations as deemed necessary for safe operation.
- (8) Section VIII. Airworthiness Documentation. This section should be completed by the DGCA who makes the determination that the aircraft meets the requirements for the certification

requested and issues the airworthiness certificate. However, this section is not applicable when a special flight permit is being issued.

- (i) Item A. Operating Limitations and Markings in Compliance with CASR part 91 sec. 91.9 as Applicable. THIS BLOCK APPLIES TO ALL AIRCRAFT COVERED BY THIS SECTION. The DGCA should check this block to indicate he has determined that a DGCA-Approved Aircraft Flight Manual, listing of operation limitations, placards, etc., as applicable to the category of certificate requested, is in the aircraft in accordance with CASR part 91 sec. 91.9.
- (ii) Item B. Current Operating Limitations Attached. Check this block when operating limitations have been issued and a copy is attached for retention in the permanent record. (Applicable to aircraft certificated in categories other than standard.)
- (iii) Items C, D, and E. Self-explanatory. Check all blocks that are applicable.
- (iv) Item F. This Inspection Recorded in Aircraft Records. The following is considered a satisfactory statement for the aircraft record entry: "I find that the aircraft meets the requirements for the certification requested and have issued a (Standard) (Special) Airworthiness Certificate dated: _____, The next annual inspection is due . signed: DGCA Inspector"

Note 1: The next inspection date is not necessary when the aircraft is under a continuous maintenance program.

Note 2: In the case of aircraft that had a previous due date, the date entered is the same. The aircraft gains no additional time because it was not in the standard category.

- (v) Item G. Statement of Conformity, DAAO Form No. 21-07 (Attach When Required). Check the block to indicate DAAO Form No. 21-07 or, when LSA, Statement of Compliance, DAAO Form No. 21-41, and attach when required.
- (vi) Item H. Previous Airworthiness Certificate Issued in accordance with CASR. If applicable, enter the appropriate CASR which the previous airworthiness certificate was issued, and check the block to indicate that the original of the certificate is attached. IF THE PREVIOUSLY ISSUED CERTIFICATE IS NOT AVAILABLE, THE DGCA REPRESENTATIVE SHOULD STATE THE REASON".
- (vii) Item I. Current Airworthiness Certificate Issuance in Accordance With CASR. Check the box and enter the applicable section of CASR part 21, subpart H.
- (viii) Item J. Light-Sport Aircraft Statement of Compliance, DAAO Form No. 21-XX (Attach When Required). Check the block to indicate that a completed applicable copy of the manufacturer's SOC, DAAO Form No. 21-XX, is attached for retention in the aircraft's permanent record.

c. Instructions for Reviewing Completed DAAO Form No. 21-21.

The DGCA must review the form to determine that all applicable entries have been made, and on issuance of the airworthiness certificate, must complete section V. In the event that an airworthiness certificate is denied, sections V and VIII must not be completed. A letter of denial, or a statement of the reason for denial, must be attached to the form and file as part of the aircraft records.

802. REVIEW AND COMPLETION OF DAAO FORM NO. 21-40, INSPECTION RECORD ISSUANCE OF (ORIGINAL) AIRWORTHINESS CERTIFICATE.

This form is used by DGCA Inspector as an inspection checklist prior to issue Certificate of Airworthiness. Part I, all blocks must be completed using the information obtained during inspection. Part II, III, IV, V tick column "Yes" for satisfactory condition or tick column "No" for unsatisfactory condition, and enter N/A if corresponding inspection item is not applicable.

PART I.: GENERAL DATA

- | | |
|-------------------------------|---|
| 1. Inspection place and date: | 1. Enter place & date of inspection. |
| A. AIRCRAFT | |
| 2. Make and Model: | 2. Enter the aircraft manufacturer and manufacturer's Designation of aircraft. |
| 3. Serial Number: | 3. Enter the serial number of aircraft. |
| 4. A/C Category: | 4. Enter category of aircraft according to TCDS. |
| 5. Mfg. Year: | 5. Enter the year of manufacture. |
| 6. Reg. Marks: | 6. Enter the registration marks assigned. |
| 7. Reg. Number: | 7. Enter the registration number assigned. |
| 8. Operator: | 8. Enter the name of operator. |
| 9. Total Time: | 9. Enter the total flight time of aircraft (TSN). |
| 10. Total Cycle: | 10. Enter the total flight cycle of aircraft (CSN). |
| 11. MTOW: | 11. Enter the maximum takeoff weight of actual aircraft configuration. TCDS or STC or other. |
| 12. Seat: | 12. Enter the number of passenger seat according to TCDS. |
| 13. TC/TC Validation Number: | 13. Enter the number of Type Certificate or Type Certificate Validation issued by DGCA. |
| 14. Revision: | 14. Enter the revision number of Type Certificate or Validation Type Certificate issued by DGCA. |
| 15. Date: | 15. Enter the date of latest revision of Type Certificate or Validation Type Certificate issued by DGCA. |
| B. ENGINE | |
| 16. Engine Make and Model: | 16. Enter the engine manufacturer and manufacturer's designation of engine. Conform to the information as the engine identification plate according CASR 45.13. |

- | | |
|--------------------|--|
| 17. Serial Number: | 17. Enter engine serial number as appeared on the engine identification plate according to CASR 45.13. |
| 18. TSN/CSN: | 18. Enter engine's total time/cycle since new. |
| 19. Remaining: | 19. Enter the engine's remaining time and/or cycle to next inspection or overhaul or removal. |

C. PROPELLER

- | | |
|---------------------|---|
| 20. Make and Model: | 20. Enter the name of propeller manufacturer and manufacturer's designation. Conform information on the propeller identification plate according to CASR 45.13. |
| 21. Serial Number: | 21. Enter propeller serial number as appeared on the propeller identification plate according to CASR 45.13. |
| 22. TSN/CSN: | 22. Enter propeller's total time/cycle since new. |
| 23. Remaining: | 23. Enter the engine's remaining time and/or cycles to next inspection or overhaul or removal. |

D. APU

- | | |
|---------------------|--|
| 24. Make and Model: | 24. Enter the name of APU manufacturer and designation. The information as appeared on the APU identification plate. |
| 25. Serial number: | 25. Enter APU serial number as appeared on the propeller identification plate. |
| 26. APU TSN/CSN: | 26. Enter APU total time/cycle since new. |
| 27. Remaining: | 27. Enter the APU remaining time and/or cycle to next inspection or overhaul or removal. |

E. LANDING GEAR

- | | |
|--|--|
| 28. Serial Number:
(NLG, R/H and L/H MLG) | 28. Enter NLG serial number as it usually appears on the NLG identification plate. |
| 29. Limitation:
(NLG, R/H and L/H MLG) | 29. Enter NLG's total cycle since new/since overhaul. |

30. Remaining: 30. Enter the NLG remaining cycle or calendar time to next inspection or overhaul or removal.

PART II.: AIRCRAFT STATUS

A. Aircraft Document/Manual

Check all applicable document or manuals for its condition and currency. Enter with number and current revision level and date, as applicable.

31. Certificate of Registration: 31. Enter issue date of Certificate of Registration. Note: ensure the aircraft has been properly registered according to CASR 47.
32. Maintenance/Inspection Program: 32. Enter maintenance program of operator, to ensure the maintenance activities have been performed in accordance with operator's current maintenance program.
33. Maintenance Manual : 33. Enter the manual number and revision number.
34. Weight & Balance Manual: 34. Enter the manual number and revision number.
35. Wiring Diagram Manual: 35. Enter the manual number and revision number.
36. Structure Repair Manual: 36. Enter the manual number and revision number.
37. Illustrated Part Catalog: 37. Enter the manual number and revision number.
38. Aircraft Flight Manual/ Pilot Operating Handbook: 38. Enter the manual number and revision number.
39. Flight Crew Operating Manual, Quick Reference Handbook: 39. Enter the manual number and revision number.
40. Master M.E.L and M.E.L: 40. Enter the manual number and revision number.
41. Cockpit Check Procedure: (CASR 121.315) 41. Enter the manual number and revision number.
42. Noise Certificate or equivalent: 42. Enter noise certificate issued by DGCA or equivalent document, ie. AFM.

B. Aircraft Inspection and Test Report

- | | |
|---|---|
| 43. Continuous Airworthiness Maintenance Program (CASR 91.401, 121.367, 135.367) | 43. Tick YES when all maintenance activities has been performed according to operator's maintenance program |
| 44. Structural Inspection Program | 44. Tick YES when applicable SIP has been performed |
| 45. Corrosion Protection Control Program | 45. Tick YES when applicable CPCP has been performed |
| 46. Non routine inspection: | 46. Tick YES when applicable non routine inspection has been performed. |
| 47. Interval inspection work package for compliance:
Last Inspection Type: Date:
TSN/CSN: | 47. Tick YES when latest interval inspection has been performed. Enter type of inspection, date of inspection and total time and cycle since new. |
| 48. Aircraft Flight/Maintenance Log: | 48. Tick YES when AFML available to record current flight & maintenance activity. |
| 49. Deferred item list (ie. HIL, CDL): | 49. Tick YES when there are no open deferred item, ie. Hold Item List, Configuration Deviation List. |
| 50. Airframe, Engine, Propeller, APU
log book: | 50. Tick YES if the log books are available and current recording. |
| 51. Compass Swing Data: | 51. Tick YES when the latest compass swing data available. |
| 52. Weight & Balance Document: (CASR 121.153, CASR 135.153) | 52. Tick YES when the latest W & B data available. |
| 53. Altimeter & Static System Check: | 53. Tick YES when the Altimeter & Static System Test record is within 24 months. |
| 54. ATC Transponder Check: | 54. Tick YES when the ATC Transponder Check record is within 24 months. |
| 55. VOR Inspection: (CASR 91.171) | 55. Tick YES when the VOR inspection record is within 30 days. |
| 56. ELT annual inspection: (CASR 91.207, CASR 121.339 and 121.353, CASR 135.351 and 121.357) | 56. Tick YES when the ELT inspection is within 12 months. |
| 57. ELT encoding: | 57. Tick YES when the ELT has been encoded according to assigned |

code.

58. Mode S Transponder programming: 58. Tick YES when the Mode S Transponder has been programmed according to assigned code.
59. Flight Data Recorder read out: (CASR 91.609, CASR 121 Appendix M.4, CASR 135 Appendix A to F) 59. Tick YES when the FDR has been read out within 12 months. Consider the required parameter to be recorded and its quality.
60. Calibration of Flight Data Recorder: 60. Tick YES when the FDR has been calibrated within 5 or 2 year as applicable.
61. Cockpit Voice Recorder or Cockpit Audio Recording System (CASR 91.609, CASR 121.344a, CASR 135.327): 61. Tick YES when the CVR/CARS has been recording within 12 months.
- C. Aircraft Records
62. Components status (OC, CM, HT) & Life Limited Part: 62. Tick YES when the component within specified limitation. Inspection may be extended to its airworthiness document ie. Airworthiness Release Certificate, installation record, etc.
63. Airworthiness Directives & Allert Service Bulletin Status: 63. Tick YES when all applicable AD and Allert ASB has been complied with. Work package shall be checked to ensure its compliance. Inspect component airworthiness document and inspection record as applicable.
64. Damage and Repair status & work package report: 64. Tick YES when all damage and repairs has been listed and all work package is available. Check repair record for the work package (repair reference, drawing, engineering calculation, etc.). Check repair approval when required. Applicable Instruction for Continuous Airworthiness is available.
65. Alteration/Modification status & work package report: 65. Tick YES when all alteration and modification has been recorded and work package is available. Check work package for its design data, ie. STC, drawing, specification, installation record, material and component airworthiness document, test report as applicable.

PART III to PART V

Inspection of Part III to Part V conducted according to inspection item as describes in column "Description". Tick YES if the result of each inspection item is SATISFACTORY. Put N/A when the inspection item is not applicable to aircraft type being inspected. Inspection item that required the number of equipment shall be entering the number of installed equipment. Additional information regarding inspection result described is put in column "Remarks".

Column "Inspector Recommendation" is used to record any findings during inspection or any additional necessary information. Inspector may recommend the result of overall inspection for the issuance of the airworthiness certificate.

803. COMPLETION OF STANDARD AIRWORTHINESS CERTIFICATE, DAAO FORM NO. 21-20.

The blocks on DAAO FORM NO. 21-20 must be completed using the information obtained with completed DAAO FORM NO. 21-21.

- a. Registration Number. Enter the Registration Number.
- b. Nationality and Registration Marks. Enter the capital letter "PK" followed by the registration number assigned to the aircraft. Example: PK-MNA
- c. Manufacturer and Model. Example: CN-235.
- d. Aircraft Serial Number. Self-explanatory.
- e. Category. Enter the appropriate category as defined in paragraph 801 of this SI. If there is no category, as in the case of aircraft certificated prior to adoption of the regulations that established categories, enter the aircraft specification, TCDS, or listing number as applicable.
- f. Authority and Basis for Issuance. Under Exceptions, enter the exemption number and a brief description of any exemptions from the applicable airworthiness standards that have been granted for the aircraft (see aircraft specification or TCDS). If no exemptions exist, enter "None."
- g. Date of Issuance. For an original or recurrent certificate, enter the date the certificate is issued. For a replacement or exchanged certificate, enter the date of the original certificate and insert the letter "R" or "E," respectively, before this date. When the certificate is being amended, insert the letter "A" before the new issuance date, which is the current date.
- h. NAME AND SIGNATURE. The typed name and signature of the DGCA issuing the certificate must be legible. The signature must be in permanent blue or black ink on the original.

804. COMPLETION OF SPECIAL AIRWORTHINESS CERTIFICATE, DAAO FORM NO. 21-24.

The blocks on DAAO Form No. 21-24 must be completed using all applicable information obtained from completed DAAO Form No. 21-21.

a. Section 1, Category. This section is applicable to all categories of special airworthiness certificates. Enter the category of special airworthiness certificate being issued, as outlined under paragraph 801, e.g., restricted, limited, etc. For experimentally certificated manned free balloons or gliders, the words "Manned Free Balloon" or "Glider" are to be put in parentheses after the word "Experimental" for the respective type of aircraft. For experimentally certificated LSA, put in "Experimental."

b. Section 2, Purpose. The operating purpose for which the special airworthiness certificate is issued, as shown by the blocks checked by the applicant under Section II, Block B on the DAAO Form No. 21-21, application for airworthiness certificate for "restricted," "experimental," and "special flight permit." If the application is for a "limited" category airworthiness certificate, the "purpose" entry should be "N/A." For LSA category aircraft, enter one of the five classes of LSA: airplanes, gliders, powered parachutes, and lighter-than-air aircraft (balloons and airships). For example, an LSA glider will be listed in the purpose as "light-sport (glider)." Because of the limited space available on the purpose line, the following abbreviations will be used: "PPC" for powered parachute.

c. Section 3.

(1) If the application is manufacturer for a special flight permit for the purpose of PRODUCTION FLIGHT TESTING, enter the name and address of the manufacturer. In all other cases, the entry in both spaces under this section should be "N/A."

(2) If the applicant is an operator enter the name and address of the operator.

d. Section 4.

This section is applicable for a special flight permit for purposes other than production flight testing.

(1) For production flight testing the entry in both spaces should be N/A.

(2) For other purposes, the "Flight From" and "Flight To" spaces should be the same as that shown on DAAO Form No. 21-21, section VII, Item B.

(3) For all other special categories, enter "N/A" in both spaces.

e. Section 5.

This section is applicable to all categories and purposes except Production Flight Testing.

(1) If the purpose is production flight testing of other than light-sport category aircraft, the entries in all spaces should be "N/A."

(2) For production flight testing of light-sport category aircraft, section 5 should include the registration number, aircraft serial number, and aircraft model.

- (3) For all other categories and purposes, information to complete the entries in this section would be contained in Section I of the application for airworthiness certificate.
- (4) Operating Limitations, dated _____ . are a Part of This Certificate. Enter the date of the operating limitations. Do not repeat or paraphrase limitations printed on the back of the certificate. Enter "N/A" if the limitations on the reverse side of the certificate are adequate for the purpose.

f. Section 6.

- (1) Date of Issuance. Enter the date the certificate is issued.
- (2) Expiry. The date of expiry should be entered if the application is for "experimental" or "special flight permit. An experimental certificate for R&D, showing compliance with regulations, crew training, or market surveys is effective for 1 year after the date of issue or renewal, unless a shorter period is deemed necessary. The duration of light-sport, amateur-built, exhibition, and air racing experimental certificates is unlimited unless good cause exists to establish a specific period. Additionally, LSA that have been grandfathered into LSA experimental purpose by rule exception and that have preexisting exemptions have an expiration date. For a provisional certificate, the entry should be in accordance with CASR part 21 sec. 21.217.
- (3) DGCA Signature. The signature should be in permanent type ink on the original and copies.

805. INSTRUCTIONS FOR REVIEWING A COMPLETED DAAO FORM NO. 21-41, LIGHT-SPORT STATEMENT OF COMPLIANCE.

This form is used for manufactured LSA including kit LSA. All information listed below applies to both, unless otherwise indicated. The manufacturer or authorized agent must complete and sign this form. Authorization for an agent's signature must be in writing from the manufacturer and as specified in the manufacturer's quality system process documentation (quality manual).

a. Section I. Aircraft Identification.

This section must contain the aircraft information as shown on the aircraft ID plate, and the aircraft or kit documentation and records. All data must be consistent throughout and match the accompanying aircraft. For light-sport kit aircraft, the date of manufacture is the date the light-sport kit was completed by its manufacturer. This section also contains boxes that must be completed for class and type LSA as manufactured.

b. Section II. Applicable User Manuals.

- (1) Consensus Standard(s). The DGCA-accepted consensus standard for the design and performance of the aircraft must be listed in this block. For example, the entry would be "ASTM F2245-04 (design and performance)." Any other applicable consensus standards not referenced elsewhere on this form also must be listed here. For example, if the engine required a standard, the entry would be "ASTM F2339-04 (design and manufacture of reciprocating spark ignition engines)." If an airframe emergency parachute is installed, the entry would be

“ASTM F2316-03 (airframe emergency parachute).” The title of the standard will also be included. For kit-built aircraft, this block also must contain the manufacturer-provided assembly instructions and the consensus standard for the design and performance and assembly instructions.

- (2) Aircraft operating instructions. This block must list the specific title or company identifier for the AOI provided with the LSA or light-sport kit, including the date and when applicable, the revision level. The block also must contain the DGCA-accepted consensus standard used to conform the AOI.
 - (3) Aircraft Maintenance and Inspection Procedures. This block must list the specific title or company identifier for the Aircraft Maintenance and Inspection Procedures provided with the LSA or light-sport kit, including the date and when applicable, the revision level. The block also must contain the DGCA-accepted consensus standard used to develop the maintenance and inspection procedures.
 - (4) Aircraft Flight Training Supplement. This block must list the specific title or company identifier for the Aircraft Flight Training Supplement provided with the LSA or light-sport kit, including the date and when applicable, the revision level. The block also must contain the DGCA-accepted consensus standard used to develop the supplement. The manufacturer may choose to include the Aircraft Flight Training Supplement as a part of, or a section within, the AOI. If so, a statement to that effect must be entered in this block.
- c. Section III. Manufacturer’s Process Documents.
- (1) Comments. This block will provide any additional information not contained elsewhere on the form. It may be used to expand on the information in the Consensus Standard(s) block in Section II or to provide other information the manufacturer or the DGCA deems necessary. For all LSA SOC’s (except for first of make and/or model), this block should be used to provide evidence that an aircraft of the same make and model was issued a special airworthiness certificate in the light-sport category. When the LSA SOC is for the manufacturer’s first of make and/or model, evidence of a previously issued U.S. special airworthiness certificate is omitted, and the statement “FIRST OF MAKE AND/OR MODEL” is included. The “first of make and/or model” statement must be used on SOC’s when applicable, and only for special LSA category certification. For kit LSA only, there must be the manufacturer’s statement identifying the kit assembly instructions, including the date and revision level, that meet the applicable consensus standard noted.
 - (2) Manufacturer’s Quality Assurance System. This block must provide the specific title or company identifier for the company’s quality assurance system used in the production of the LSA or light-sport kit, including the date and the revision level. The block also must contain the DGCA-accepted consensus standard used to conform the quality assurance system.
 - (3) Manufacturer’s Continued Airworthiness System. This block must provide the specific title or company identifier for the company’s continued airworthiness system used by the

company to support the aircraft, including the date and when applicable, the revision level. The block also must contain the DGCA-accepted consensus standard used to conform the continued airworthiness system.

d. Section IV. Manufacturer's Certification.

- (1) This section must contain the manufacturer's certifying statement as printed on the form including the following:
 - (i) Aircraft or kit serial number in the blank provided.
 - (ii) For kit LSA, the word "aircraft" in the first sentence (right before "serial number") and in the second sentence "aircraft" (right before "was") must be lined through and the word "kit" added above it using permanent ink.
 - (iii) For kit LSA, the following words will also be lined through: "(3) was ground and flight tested successfully and (4) is in a condition for safe operation." (2) This section must contain the name and title of the manufacturer's chief executive officer or chief quality officer, and/or the manufacturer's authorized agent who complete and sign this form.
- (2) Authorization for an agent's signature will be in writing from the manufacturer with all authorized signatory names and titles specified within the manufacturer's quality system process documentation (quality manual). In some cases the manufacturer's quality assurance system will require two signatures, one at the production facility and one for any precertification work to include reassembly after transport, shipment, and/or flight testing, assembly, and installations. This also must have signatory authorization by names and titles within the manufacturer's quality system process documentation.

806. INSTRUCTION FOR VERIFYING THE APPLICANT'S ENTRIES AND COMPLETING DAAO FORM NO. 21-19, APPLICATION EXPORT C OF A.

The applicant must complete part I of the application for aircraft. The applicant may complete part II of the application for aircraft engines, propellers. Part III is for DGCA use only. All items are self-explanatory except as noted. Instructions for completion of parts I and II are used to help the DGCA review the form as submitted by the applicant. A completed DAAO FORM NO. 21-19 must be filed and retained for a minimum of 2 years, then destroyed in accordance with standard agency procedures.

- a. Export Certificate No. This block is left blank by the applicant and should be completed by DGCA.
- b. Part I (For Aircraft).
 - (1) Item Nos. 1-4. Self-explanatory.
 - (2) Item No. 5. Description of Aircraft . Self-explanatory, except as follows:
 - (i) Enter nationality and registration marks as assigned under CASR part 47. Any questions concerning the marking requirements of the importing

country/jurisdiction must be resolved between the exporter/importer and the CAA of that country/jurisdiction.

- (ii) Under DGCA Spec. No., enter the pertinent specification number or the TCDS number, as applicable.
 - (iii) For new and used aircraft, enter in the Operating Time (Hours) block the number of operating hours since the annual type inspection, and the total time-in-service. Aircraft engines and propellers are no longer required to be new, as long as the importing country/jurisdiction accepts the aircraft with used engines and propellers. For aircraft, the blocks for engine(s) and propeller(s) must be completed to reflect the required information, as applicable.
- (3) Item Nos. 6 and 7. These items are self-explanatory; however, if the No box is checked, explain the deviations in item No. 10 and attach the original or true copy of documents stating that the product will be acceptable with the deviations listed, as received from the CAA of the importing country/jurisdiction.
 - (4) Item No. 8. This item provides a means of establishing the date the ownership of the stated product is expected to pass to the purchaser.
 - (5) Item No. 9. This item provides a means of documenting the preservation and packaging methods used to protect against corrosion and damage. It is recommended that all products be appropriately treated for corrosion and damage prevention.
 - (6) Item No. 10. This space may be used to convey the information required under item no. 6 and 7. This space also may be used by the exporter to convey any other information pertinent to the issuance of the export airworthiness approval. Additional sheets may be attached, as necessary, and appropriately cross-referenced. In addition, list the documents that the regulation requires to be submitted with the application under the provisions of CASR part 21 sec. 21.327. After review by the DGCA, the documents required to be furnished to the importing country/jurisdiction under CASR part 21 sec. 21.333 will be supplied to the applicant. Item No. 11.
 - (7) The authorized representative of the exporter must sign this certificate in permanent blue or black ink and ensure it is dated. The typed name, title, and signature must be legible.
- c. Part II (For Aircraft Engines, Propellers, and Articles). complete as follows:
- (1) Item Nos. 12-14. Self-explanatory.
 - (2) Item No. 15. Use the instructions for entering eligibility information from SI 21-09

Note: No entry is required in the DGCA Spec. No. box.

- (3) Item No. 16. Self-explanatory.
- (4) Item No. 17. This item provides for the description and listing of the aircraft engine, propellers, and articles being exported. Select the first check box and list the aircraft engine, propellers, and articles in the space provided. If the entire list of the aircraft engine, propellers, and articles cannot fit in the space provided, select the second check box and, on the line provided,

specifically identify the exporter's shipping document covering the aircraft engine, propellers, and articles concerned. Attach a copy of this document to the form. In either case, if more than one type of aircraft engine, propeller, and article is involved, they are to be listed according to the aircraft engine, propeller, or article for which they are eligible. List the name, part number (or equivalent means of identifying each physical aircraft engine, propeller, or article), and quantity of each article.

- (5) Item No. 18. This item is self-explanatory. If the No box is checked, explain the noncompliance in item No. 10 and attach the original, or a true copy, of the documents stating that the product will be acceptable with the deviation(s) listed, as received from the CAA of the importing country/jurisdiction.
- (6) Item No. 19. This item provides a means of documenting the preservation and packaging methods used to protect against corrosion and damage. It is recommended that all products be appropriately treated for corrosion and damage prevention.
- (7) Item No. 20. The authorized representative of the exporter must date and sign this certification in permanent blue or black ink above the typed or printed name and title.

d. Part III. Approval (For DGCA Use Only).

- (1) Item No. 21. The DGCA inspector signature must be legible and in permanent blue or black ink above the typed name.
- (2) Item No. 22. The DGCA inspector must enter the quantity of DAAO Form No. 21-18 issued for the aircraft engine, propellers, and articles described in part II of the form.
- (3) Item No. 23. A completed spot check of the file is indicated by the signature of the DGCA supervising in permanent blue or black ink above the typed name.


807. EXAMINATION, REVIEW, AND ROUTING OF CERTIFICATION FILES.

- a. It is the responsibility of all DGCA inspector to examine in detail each certification file processed to ensure accuracy, completeness, legibility, and compliance with applicable requirements, including all necessary attachments. The following list represents the primary data which is required for retention in the permanent airworthiness certification files, for original and renewal airworthiness certification including domestic, import, and export. As applicable to the particular certification action, these are the documents which should normally be submitted to DGCA office. Do not include any documentation that is not required in support of the certification action.
 - (1) Airworthiness Certificates.
 - (i) Original DAAO Form No. 21-21, Application Certificate of Airworthiness.
 - (ii) A copy of DAAO Form No. 21-20, Standard C of A.
 - (iii) Applications for special flight permits for operation of overweight aircraft only in accordance with CASR part 21 sec. 21.197(b).
 - (iv) Applications for an experimental airworthiness certificate must include the data required by CASR part 21 sec. 21.193, as applicable.
 - (v) Original DAAO Form No. 21-07, Statement of Conformity

- (vi) A copy of DAAO Form No. 21-18 or any other data, drawings, photographs, etc., as applicable.
 - (vii) A copy of DAAO Form No. 43-337, as applicable. Do not include referenced data forming the basis for approval of the repair or alteration.
 - (viii) A copy of DAAO Form No. 21-24, as applicable.
 - (ix) A copy of operating limitations, if issued.
 - (x) The foreign airworthiness certificate for imported aircraft, as applicable.
 - (xi) A copy of DAAO Form No. 21-41, Statement of Compliance for special light-sport category and kit experimental LSA.
 - (xii) A copy of the manufacturer's production flight test record(s) for special light-sport category.
 - (xiii) DAAO Form No. 21-42, Eligibility statement-amateur built aircraft.
 - (xiv) A copy of the applicant's program letter.
- (2) Export of an Aircraft.
- (i) The original DAAO Form No. 21-19, Application Export Airworthiness Approval.
 - (ii) The statement of acceptance from an importing country/jurisdiction listing the specific noncompliance(s), as applicable.
 - (iii) A copy of DAAO Form No. 21-22.
- (3) Export of Aircraft Engines, Propellers, and Articles.
- (i) The original application DAAO Form No. 21-19 along with any data showing acceptance of deviations from the CAA of the country/jurisdiction of import.
 - (ii) A copy of DAAO Form No. 21-18, Airworthiness Release Certificate.
 - (iii) The original DAAO Form No. 21-06, Conformity Inspection Record.
- (4) Import of a Product
- (i) Aircraft. The Export C of A issued by the CAA of the State of Manufacture that states the aircraft conforms to its type design and is in a condition for safe operation.
 - (ii) Aircraft Engine and Propeller. The certification from the aircraft State of Manufacture for engines and propellers that was submitted when deemed they were a part of, or were to be installed on, an aircraft. (ex. DAAO Form No. 21.18, FAA Form 8130-3 or EASA Form-1)
 - (iii) The applicable documents listed in paragraph 806 a (1) of this SI.


- b. In addition, the DGCA offices must maintain soft copies of to the above-mentioned data n of the product and/or article.

APPENDIX A. DAAO Form No. 21-43

	<p>MINISTRY OF TRANSPORTATION DIRECTORATE GENERAL OF CIVIL AVIATION DIRECTORATE OF AIRWORTHINESS AND AIRCRAFT OPERATIONS Karya Building 22nd floor Jalan Medan Merdeka Barat No. 8 Jakarta Pusat Telp. : (+62-21)3506664 – 3506665 Fax : 3506663 PO. Box 3049, Jakarta 10110 website: hubud.dephub.go.id; e-mail: daao_dgca@dephub.go.id</p>	
	<p>AFFIDAVIT OF OWNERSHIP FOR EXPERIMENTAL AIRCRAFT INCLUDING AMATEUR-BUILT AIRCRAFT AND OTHER NON TYPE CERTIFICATED AIRCRAFT (exclude light-sport)</p>	
Nationality and Registration Marks:		
Name of Amateur-built builder or Name of Non TC manufacturer:		
Model:	Serial Number:	
Class (airplane, rotorcraft, glider, weight shift control, power-parachute, etc.):		
Type of Engine installed (reciprocating, turbopropeller, 2 or 4 cycle, etc.):		
Number of Engine installed:		
Manufacturer, Model and Serial Number of each engine installed:		
Built for Land or Sea Operation:	Number of Seats:	
MUST CHECK ONE		
<input type="checkbox"/> More than 50% of the above-described aircraft was built from miscellaneous parts and I am the owner. (This option is for amateur-built aircraft)		
<input type="checkbox"/> More than 50% of the above-described aircraft was built from a kit (prefabricated parts) and I am the owner. The bill of sale from the kit manufacturer is attached. (This option is for amateur-built aircraft)		
<input type="checkbox"/> I certify that the above-described aircraft is a newly manufactured non-type certificated aircraft and is not currently registered in another country. (This option is for manufacturers only)		
<input type="checkbox"/> I certify that the above-mentioned aircraft is previously manufactured (used) non-type certificated aircraft and is not currently registered in another country.		
<input type="checkbox"/> (This option is for owners of previously manufactured aircraft (only)		
<input type="checkbox"/> (Unable to obtain complete chain of ownership. Statement as to ownership history and whereabouts of aircraft is attached.		
Name of Owner:	Title (if appropriate):	
(Signature of Owner):		
Address:	Province:	Post Code:
City:		
Telephone:		
Notary Public:		
Subscribed and sworn to before me this.	day of	
My Commission Expires:		
(Signature of Notary Public)		


DAAO Form No. 21-43

APPENDIX B. DAAO FORM No. 21-42

	<p>MINISTRY OF TRANSPORTATION DIRECTORATE GENERAL OF CIVIL AVIATION DIRECTORATE OF AIRWORTHINESS AND AIRCRAFT OPERATIONS Karya Building 22nd floor Jalan Medan Merdeka Barat No. 8 Jakarta Pusat Telp. : (+62-21)3506664 - 3506665 Fax : 3506663 PO. Box 3049, Jakarta 10110 website: hubud.dephub.go.id; e-mail: daao_dgca@dephub.go.id</p>												
ELIGIBILITY STATEMENT													
I. REGISTERED OWNER DATA													
Name(s): _____ Address(es): _____ <div style="display: flex; justify-content: space-between; margin-left: 100px;"> No. & street City Province Post Code </div> Telephone No.(s): _____ <div style="display: flex; justify-content: space-around; margin-left: 100px;"> Residence Business </div>													
II. AIRCRAFT DATA													
Model: _____ Assigned Serial No.: _____ Registration No.: _____ Aircraft Fabricated: Plan <input type="checkbox"/> Kit <input type="checkbox"/>	Engine(s) Make: _____ Engine(s) Serial No.: _____ Prop/Rotor(s) Make: _____ Prop/Rotor(s) Serial No(s): _____												
III. MAJOR PORTION ELIGIBILITY STATEMENT OF APPLICANT													
I certify the the major portion of this aircraft (identified in Section II above) was fabricated and assembled by _____ <p style="text-align: center;">Name of all builders (please print)</p> solely for my (our) education or recreation, in accordance with CASR Part 21, Certification Procedure for Products and Parts, 21.191(g), operating amateur-built aircraft. I have records to support this statement and will make them available to DGCA upon request. During the fabrication and assembly of this project. I/we used the following commercial assistance (mark N/A if no commercial assistance was used). <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">_____</td> <td style="width: 25%; border: none;">_____</td> <td style="width: 25%; border: none;">_____</td> </tr> <tr> <td style="border: none;">Name of company or individual(s)</td> <td style="border: none;">City & Province</td> <td style="border: none;">Phone</td> </tr> <tr> <td style="border: none;">_____</td> <td style="border: none;">_____</td> <td style="border: none;">_____</td> </tr> <tr> <td style="border: none;">Name of company or individual(s)</td> <td style="border: none;">City & Province</td> <td style="border: none;">Phone</td> </tr> </table> <p style="text-align: center;">-NOTICE-</p> Whoever in any matter within the jurisdiction of the executive, legislative, or judicial branch of the Government of the Republic of Indonesia, knowingly and willfully falsifies, conceals or cover up by any trick, scheme, or device a material fact, or who makes any materially false, fictitious or fraudulent statement or representation, or makes or uses any false writing or document knowing the same to contain any materially false, fictitious or fraudulent statement or entry shall be fined under thi title, imprisoned not more than 5 years or, if the offense involves international or domestic terrorism, imprisoned not more than 8 years, or both		_____	_____	_____	Name of company or individual(s)	City & Province	Phone	_____	_____	_____	Name of company or individual(s)	City & Province	Phone
_____	_____	_____											
Name of company or individual(s)	City & Province	Phone											
_____	_____	_____											
Name of company or individual(s)	City & Province	Phone											
APPLICANT'S DECLARATION													
I hereby certify that all statements and answers provided by me in this statement form are complete and true to the best of my knowledge, and I agree that they are to be considered part of the basis for the issuance of any DGCA certificate to me.													
Signature of Applicant (in ink)	Date												
IV. NOTARIZATION STATEMENT													

DAAO Form No. 21-42

APPENDIX C. DAAO Form No. 21-21

		MINISTRY OF TRANSPORTATION DIRECTORATE GENERAL OF CIVIL AVIATION DIRECTORATE OF AIRWORTHINESS AND AIRCRAFT OPERATIONS Karya Building 21 st floor Jalan Medan Merdeka Barat No. 8 Jakarta Pusat Telp. : (+62-21)3506664 – 3506665 Fax : 3506663 PO. Box 3049, Jakarta 10110 website: www.khubad.dephub.go.id; e-mail: daao_dgca@dephub.go.id				
		APPLICATION FOR AIRWORTHINESS CERTIFICATE				
I. AIRCRAFT DESCRIPTION						
1. NATIONALITY AND REGISTRATION MARKS		2. AIRCRAFT MANUFACTURER		3. AIRCRAFT MODEL		4. SERIAL NUMBER
5. ENGINE MANUFACTURER		7. ENGINE MODEL	8. ENGINE SERIAL NUMBER	1)	2)	3)
9. PROPELLER MANUFACTURE		10. PROPELLER MODEL	11. PROPELLER SERIAL NUMBER	1)	2)	3)
12. MAXIMUM TAKE-OFF WEIGHT (LBS)		<input type="checkbox"/> 0 – 15.000 <input type="checkbox"/> 15.001 – 100.000 <input type="checkbox"/> 100.001 – 200.000 <input type="checkbox"/> 200.001 - up				
II. CERTIFICATION REQUESTED						
APPLICATION IS HEREBY MADE FOR: (CHECK APPROPRIATE ITEMS)						
A	1	STANDARD AIRWORTHINESS CERTIFICATE	NORMAL	COMBUTER	TRANSPORT	UTILITY
					ACROBATIC	BALLOON
B	2	SPECIAL AIRWORTHINESS CERTIFICATE				
	1	LIMITED				
	2	LIGHT-SPORT (Indicate Class)	Airplane	Power Parachute	Weight-shift control	Glider
			Lighter than Air			
	3	PROVISIONAL	1	CLASS I		
			2	CLASS II		
	4	RESTRICTED	1	AGRICULTURE & PEST CONTROL	2	WEATHER CONTROL
			4	FOREST	5	AERIAL ADVERTISING
			7	AERIAL SURVEYING	6	OTHERS
	5	EXPERIMENTAL	1	RESEARCH AND DEVELOPMENT	2	AMATEUR BUILT
			4	AIR RACING	7	CREW TRAINING
			6	TO SHOW COMPLIANCE WITH CASR	8	EXHIBITION
			9	OPERATING LIGHT SPORT	9A	Existing aircraft without an airworthiness certificate and do not meet CASR 103.1
					9B	Operating Light-Sport Kit-built
					9C	Operating Light-Sport previously issued a special light sport category airworthiness certificate under CASR 21.190
			10	UNMANNED AIRCRAFT	10A	RESEARCH & DEVELOPMENT
					10B	MARKET SURVEY
					10C	CREW TRAINING
	6	SPECIAL FLIGHT PERMIT	1	FERRY FLIGHT FOR REPAIRS, ALTERATION, MAINTENANCE OR STORAGE		
			2	EVACUATE FROM AREA OF IMPENDING DANGER		
			3	OPERATION IN EXCESS OF MAXIMUM CERTIFICATED TAKE-OFF WEIGHT		
			4	DELIVERING OR EXPORT	5	CUSTOMER DEMONSTRATION FLIGHT
			6	PRODUCTION FLIGHT TESTING	7	OTHERS
C	3	MULTIPLE AIRWORTHINESS CERTIFICATE				
III. OWNER CERTIFICATION						
A. REGISTERED OWNER			IF DEALER, CHECK HERE			
NAME			ADDRESS			
B. AIRCRAFT CERTIFICATION BASIS						
AIRCRAFT SPECIFICATION OR TYPE CERTIFICATION DATA SHEET			AIRWORTHINESS DIRECTIVE (GIVE THE LATEST AD NO)			
AIRCRAFT LISTING (GIVE PAGE NO)			SUPPLEMENTAL TYPE CERTIFICATE (LIST THE STC INCORPORATED)			
C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS						
CHECK IF RECORD IN COMPLIANCE CASR 121/135/91		TOTAL AIRFRAME HOURS –		EXPERIMENTAL ONLY –		
D. CERTIFICATION – I Herby certify that I am the owner (or his agent) of the aircraft described above that the aircraft is registered with the Directorate General of Civil Aviation in accordance with Article 24 and 25 of the Aviation Act No. 1 of 2009 and applicable Civil Aviation Safety Regulations and that the aircraft has been inspected and is airworthy and eligible for the airworthiness certificate requested.						
DATE OF APPLICANT		NAME AND TITLE			SIGNATURE	
IV. INSPECTION AGENCY VERIFICATION						
A. THE AIRCRAFT DESCRIBED ABOVE HAS BEEN INSPECTED AND FOUND AIRWORTHY BY:						
AIRCRAFT AIR OPERATOR CERTIFICATE HOLDER NO.:			APPROVED MAINTENANCE ORGANIZATION HOLDER NO.:			
AIRCRAFT OPERATING CERTIFICATE HOLDER NO.:			AIRCRAFT MANUFACTURER.:			

DATE	TITLE	SIGNATURE
V. DGCA REPRESENTATIVE CERTIFICATION		
<i>I find that the aircraft described in Section I meets the requirements for the certificate requested/amendment or modification of this current airworthiness certificate</i>		
DATE	DGCA INSPECTOR'S SIGNATURE AND STAMP	DESIGNEE'S SIGNATURE AND STAMP

DAAO Form 21-21 (11/14)

Page: 1 of 2

VI. PRODUCT FLIGHT TESTING

A. MANUFACTURER		
NAME	ADDRESS	
B. DESCRIPTION OF FLIGHT		
PRODUCTION CERTIFICATE		
TYPE CERTIFICATE ONLY		
APPROVED PRODUCTION INSPECTION SYSTEM		
C. GIVE QUANTITY OF CERTIFICATES REQUIRED FOR OPERATING NEEDS		
DATE OF APPLICANT	NAME AND TITLE	SIGNATURE

VII. SPECIAL FLIGHT PERMIT PURPOSE OTHER THAN PRODUCTION FLIGHT TEST

A. DESCRIPTION OF AIRCRAFT		
REGISTERED OWNER	ADDRESS	
BUILDER	MODEL	
SERIAL NUMBER	REGISTRATION MARK	
B. PRODUCTION BASIS		
FROM	TO	
VIA	DEPARTURE	DURATION
C. CREW REQUIRED TO OPERATE THE AIRCRAFT AND ITS EQUIPMENT		
A PILOT	CO-PILOT	NAVIGATOR
D. THE AIRCRAFT DOES NOT MEET THE APPLICABLE AIRWORTHINESS REQUIREMENTS AS FOLLOWS:		
E. THE FOLLOWING RESTRICTIONS ARE CONSIDERED NECESSARY FOR SAFE OPERATION		

F. CERTIFICATION - I hereby certify that I am the registered owner (or his agent) of the aircraft described above; that the aircraft is registered with the Directorate General of Civil Aviation in accordance with Article 24 and 25 of Aviation Act No. 1 of 2009 and applicable Civil Aviation Safety Regulations and the aircraft has been inspected and is airworthy for the flight described.

DATE _____ NAME AND TITLE _____ SIGNATURE _____

VIII. AIRWORTHINESS DOCUMENTATIONS (DGCA USE ONLY)

A. CURRENT OPERATING LIMITATION ATTACHED	E. STATEMENT OF CONFORMITY, DAC FORM 21-7
B. DATA DRAWING, PHOTOGRAPH, ETC. (ATTACHED WHEN REQUIRED)	F. PREVIOUS CERTIFICATE of AIRWORTHINESS ISSUED ON
C. CURRENT WEIGHT AND BALANCE INFORMATION AVAILABLE IN AIRCRAFT.	G. CURRENT CERTIFICATE of AIRWORTHINESS ISSUED ON
D. MAJOR REPAIR AND ALTERATION DAC FORM 43-337(ATTACHED).	H. OTHER (SPECIFY).

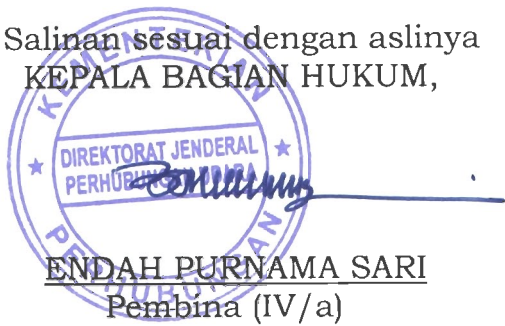
DAAO Form No. 21-21

DIREKTUR JENDERAL PERHUBUNGAN UDARA

ttd

Dr. Ir. AGUS SANTOSO, M. Sc

Salinan sesuai dengan aslinya
KEPALA BAGIAN HUKUM,



DIREKTORAT JENDERAL
PERHUBUNGAN UDARA

ENDAH PURNAMA SARI
Pembina (IV/a)
NIP. 19680704 199503 2 001