**INTRODUCTION TO** 

**AIRCRAFT MAINTENANCE LICENSING** 

SINGAPORE CHANGI AIRPORT



Civil Aviation Authority of Singapore



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This booklet provides basic information on the SAR-66 Aircraft Maintenance Licensing requirements. It also provides information relating to the conversion of an existing SAR Section 7 Aircraft Maintenance Engineer Licence to a SAR-66 Aircraft Maintenance Licence. It is intended only to be an introduction to the SAR-66 and not to replace the SAR-66 or Advisory Circulars related to the SAR-66. The information contained in this booklet is valid as of 1 April 2007.

Please refer to the SAR-66 and related Advisory Circulars for the regulatory requirements pertaining to aircraft maintenance licensing. These documents are available from the CAAS website at www.caas.gov.sg.

No further revisions will be issued to this booklet.

# Introduction

This booklet is intended for the reference of SAR Section 7 licence holders and for those in the process of qualifying for an aircraft maintenance licence. It provides basic information on:

- (i) the SAR-66 licence categories, sub-categories and privileges;
- (ii) the requirements for the grant of a SAR-66 licence;
- (iii) the issuing of certification authorisation by maintenance organisation;
- (iv) the issuing of certificate of release to service by licence holder; and
- (v) the licence conversion programme to facilitate transition to the SAR-66 licensing system.

A list of frequently asked questions is also included in this booklet.

For detailed information, you should refer to the SAR-66 and its related Advisory Circulars.

The SAR-66 issued in 2004 introduced the SAR-66 Category A licence. Issue 2 of the SAR-66 dated 15 August 2006 introduces Category B1, B2 and C licences to replace the Category A, C, E, I and R licences issued under SAR Section 7. To support the transition to SAR-66, a number of Advisory Circulars are issued.



## About the SAR-66 Licence

The SAR-66 replaces SAR Section 7 as the CAAS Requirements for licensing of aircraft maintenance personnel. SAR-66 licence may be issued under one or more of the followin categories:

- Category A Line maintenance certifying technician
- Category B1 Line maintenance certifying engineer mechanical
- Category B2 Line maintenance certifying engineer avionics
- Category C Base maintenance certifying engineer

The title shown against each category designator is to povide a readily understandable indication of the job function.

#### Category A Licence

The Category A licence is a non-type rated licence.

This licence permits the holder to issue certificates of release to service following minor scheduled line maintenance and simple defect rectification in the line maintenance environment. Examples of tasks that a Category A licence holder can be authorised to perform are: replacement of wheel assemblies, replacement of some cabin items, routine fluid servicing, opening and closing of cowlings and quick access panels. The full list of tasks is given in SAR-145.

A Category A licence holder is permitted to certify only for work that he or she has personally performed. He or she is not permitted to supervise individuals and certify for their work.

The Category A licence holder will primarily perform certification for the release of an aircraft on line maintance which require only simple and routine tasks to be carried out. Diagnosis of defects is out of the scope of a Category A licence and can only be carried out by an appropriately licensed and authorised Category B1 or B2 licence holder.

The privileges of a Category A licence are not applicable to base maintenance.

The Category A licence is further classified into sub-categories according to the aircraft/engine technology. The sub-categories are:

- i) A1 Aeroplanes Turbine
- ii) A2 Aeroplanes Piston
- iii) A3 Helicopters Turbine
- iv) A4 Helicopters Piston



Category B1 / B2 Licence

The Category B1 and B2 licences are aircraft type-rated licences. The holder is permitted to certify the release to service only of aircraft types that are endorsed as ratings on his or her licence.

In the line maintenance environment, a Category B1 or B2 licence holder may certify an aircraft for release to service following maintenance.

In base maintenance, however, the Category B1 or B2 licence holder does not act as the certifying staff. Category B1 and B2 licence holders support the Category C base maintenance certifying engineer and will sign for maintenance work performed by themselves or by technicians under their supervision. The certificate of release to service after base maintenance will be issued by the Category C base maintenance certifying engineer.

The Category B1 licence permits the holder to work on, supervise and, if appropriate, issue certificates of release for aircraft structure, powerplant, mechanical and electrical systems. The holder is also permitted to carry out the replacement and certify for the release to service following the replacement of limited avionic line replaceable units that only require simple tests to prove their serviceability.

The Category B2 licence permits the holder to work on, supervise and, if appropriate, issue certificates of release to service for schedule or unschedule task in the electrical power generation and distribution, and avionic systems.

A Category B1 licence holder will automatically qualify for a Category A endosement on his or her licence. A Category B2 licence holder will

need to seperately qualify for a Category A endosement in order to perform simple mechanical tasks and be able to certify for the release to service of such work.

The Category B1 licence is further classified into sub-categories according to the aircraft/engine technology. The sub-categories are:

- i) B1.1 Aeroplanes Turbine
- ii) B1.2 Aeroplanes Piston
- iii) B1.3 Helicopters Turbine
- iv) B1.4 Helicopters Piston

There is no sub-category for Category B2 licence.



# Category C Licence

The Category C licence is an aircraft type-rated licence.

It permits the holder to issue the certificate of release to service of an aircraft following base maintenance. The Category C certifying staff plays a maintenance management role and is responsible for the issue of the single certificate of release to service for the complete aircraft following base maintenance.

The basis of the certification is that the maintenance has been carried out in accordance with the SAR-145 and company procedures by competent technicians, and that both Category B1 and B2 support staff have signed for the task under their respective specialisations. The principal function of the Category C certifying staff is to ensure that all maintenance tasks in a particular maintance package have been accounted for, appropriate address and signed off by appropriate Category B1 and B2 support staff before issuing the certificate of release to service of the aircraft.

# Qualifying for a SAR-66 Licence

#### Knowledge Requirements

The CAAS examinations which must be passed in order to satisfy the knowledge requirements for the various licence categories are described in SAR-66.25. They are summarised as follows:

Module No.	Module Name	Cat A or B1 Aeroplane with:		Cat A Aeropla		Cat B2
		Turbine Engine		Turbine Engine		Avionics
M01	Mathematics	Х	Х	Х	Х	X
M02	Physics	Х	Х	Х	Х	X
M03	Electrical Fundamentals	Х	Х	X	Х	Х
M04 <sup>1</sup>	Electronic Fundamentals	Х	Х	Х	Х	Х
M05	Digital Techniques/ Electronic Instrument Systems	Х	Х	Х	Х	Х
M06	Materials and Hardware	Х	Х	Х	Х	X
M07	Maintenance Practices	Х	Х	Х	Х	X
M08	<b>Basic Aerodynamics</b>	Х	Х	Х	Х	X
M09	Human Factors	Х	Х	Х	Х	X
M10	Aviation Legislation	Х	Х	X	Х	X
M11A	M11A Turbine Aeroplane Aerodynamics, Structures and Systems					
M11B			Х			
M12	Helicopter Aerodynamics, Structures and Systems			Х	Х	
M13						Х
M14	Ŭ					X
M15	Gas Turbine Engine	Х		Х		
M16	Piston Engine		Х		Х	
M17 <sup>2</sup>	Propeller	Х	Х			
M50	Essay Paper for Cat A & B	Х	Х	Х	Х	Х
M60 <sup>3</sup>	Bridging Paper for Cat A	Х	Х	Х	Х	

<sup>1</sup> M04 is not applicable to candidates seeking to qualify for a Category A licence.

<sup>2</sup> Candidates who do not have examination credit for Module 17 may be considered for grant of a SAR-66 Category A1 or B1.1 licence with limitation against propeller.

<sup>3</sup> M60 is a bridging paper for applicants seeking to qualify for SAR-66 category A licence after having passed the following subjects under SAR Section 7: B11, B12, B13, A11, A12, A14, A16 and A17.

# Experience Requirements for the various licence Categories

The following table shows the experience requirements that must be met for the issuance of a basic licence in the various categories. A part of the experience requirement must be demonstrated in the form of a Schedule of Experience (SOE). Refer SAR-66.30 and AMC 66.30 for more details on the experience requirements. Advisory Circular, AC 66-2 Guide to Compilation of Schedule of Experience (SOE) provides details on how the necessary experience may be demonstrated.

Categories	Experience Requirements
A / B1.2 / B1.4	3 years practical maintenance experience on operating aircraft; or 2 years practical maintenance experience on operating aircraft and completion of technical skills training considered relevant by CAAS; or 1 year of practical maintenance experience on operating aircraft and completion of a SAR-147 approved basic training course
B1.1 / B1.3 / B2	<ul> <li>5 years practical maintenance experience on operating aircraft; or</li> <li>3 years practical maintenance experience on operating aircraft and completion of technical skills training considered relevant by CAAS; or</li> <li>2 years of practical maintenance experience on operating aircraft and completion of a SAR-147 approved basic training course.</li> </ul>
C (large aircraft)	3 years of experience exercising Category B1.1, B1.3 or B2 privileges on large aircraft or as SAR-145 B1.1, B1.3 or B2 support staff working on large aircraft, or a combination of both; or 5 years of experience exercising Category B1.2 or B1.4 privileges on large aircraft or as SAR-145 B1.1, B1.3 or B2 support staff working on large aircraft, or a combination of both; or Holder of an appropriate technical degree from a university recognised by CAAS, plus 3 years experience working in a civil aircraft maintenance environment on a representative selection of tasks directly associated with aircraft maintenance, including 6 months of observation of base maintenance tasks.
C (non-large aircraft)	3 years of experience exercising Category B1 or B2 privileges on non-large aircraft or as SAR-145 B1 or B2 support staff working on non-large aircraft, or a combination of both; or Holder of an appropriate technical degree from a university recognised by CAAS, plus 3 years experience working in a civil aircraft maintenance environment on a representative selection of tasks directly associated with aircraft maintenance, including 6 months of observation of base maintenance tasks.

Note: 'Large aircraft' means an aircraft, classified as an aeroplane with a maximum take-off mass of more than 5,700 kg, or a multi-engined helicopter.

### Issue of a CRS under the SAR-66 system

#### Certification Authorisation by Maintenance Organisation

The basic SAR-66 aircraft maintenance licence is an attestation that the holder has met the SAR-66 knowledge and experience requirements. The licence by itself does not entitle the holder to issue a certificate of release to service of an aircraft, its structure, powerplant or any of its systems.

Before a licence holder can issue a certificate of release to service, he or she must also be trained in the specific aircraft configurations maintained by his or her employer. He or she will also need to be trained in the company's procedures and, if necessary, the procedures of the customer airline. Only after the licence holder has acquired such company-specific knowledge can he or she be authorised to issue a certificate of release to service. Such an authorisation is called a certification authorisation and is issued by the maintenance organisation. The certification authorisation issued by the company becomes invalid if the SAR-66 licence ceases to be valid.

Only persons holding a valid SAR-66 licence with the appropriate certification authorisation may issue a certificate of release to service. Such persons are said to be appropriately licensed (by CAAS) and authorised (by the company).



# Certification of Release to Service following Line Maintenance

For line maintenance, the certification of release to service for aircraft may be performed by appropriately licensed and authorised Category A, Category B1 or Category B2 licence holders.

The person who carries out the scheduled line maintenance task(s) and unscheduled defect rectification(s) should also carry out the inspection function. Such a person should issue the certificate of release to service for the tasks only when satisfied by self inspection that the tasks have been accomplished in accordance with the approved maintenance data and procedures.

### Certification of Release to Service following Base Maintenance

For base maintenance, the certification of release to service of an aircraft is performed by an appropriately licensed and authorised Category C licence holder.

The certifying Category C licence holder should be supported by a team of authorised Category B1 and B2 licence holders. These competent persons who carry out or supervise the performance of individual base maintenance tasks should sign for the tasks accomplished only when satisfied by selfinspection that the tasks have been carried out in accordance with the approved maintenance data and procedures. Such task sign-offs support the issue of the certificate of release to service of the aircraft by the Category C licence holder following base maintenance. In cases where a duplicate inspection is necessary, the second inspection shall be carried out by another appropriately licensed and rated authorised Category B licence holder.

The Category C certifying staff should issue the certificate of release to service of the aircraft when satisfied that the complete maintenance process has been carried out in accordance with the approved maintenance data and procedures.

# SAR Section 7 licence to SAR-66 licence Conversion Programme

The conversion to SAR-66 licence will be carried out over a 2-year period, from 1 January 2007 to 31 December 2008. All existing SAR Section 7 licences will cease to be valid after 31 December 2008. Existing licence holders are required to apply for a SAR-66 licence when their SAR Section 7 licence is due for renewal. The SAR Section 7 licence of the individual licence holder will be cancelled when the SAR-66 licence is issued to him or her.

#### Application for Conversion to a SAR-66 Licence

To initiate a conversion to a SAR-66 licence, existing SAR Section 7 licence holders must submit an application using the SAR-66 Licence Application Form, CAAS(AW)01A. The instructions to the use of this application form are provided in a guidance document called the Guidance to Complete SAR-66 Aircraft Maintenance Licence Application Form. All users of the application form should read and fully understand the relevant notes in the guidance document before filling up the various sections on the application form.



#### Criteria for Conversion to a SAR-66 Licence

To facilitate an orderly transition, CAAS will accept application for conversion to SAR-66 licence only if any one or more of the following criteria is met:

- (i) The existing SAR Section 7 licence is due for renewal within the next 3 months;
- (ii) The applicant qualifies for a licence extension (i.e. inclusion of a (sub)category, rating, or removal of limitation); or
- (iii) There is a need to update personal particular(s) that are reflected on the existing SAR Section 7 licence booklet.

Submission for Application of Licence Conversion through your Quality Department

Your quality department has been requested by the CAAS to provide the necessary assistance to you when you are preparing for submission of application for a SAR-66 licence. In cases involving claim of protected rights, the quality department has to countersign on the application form and provide the necessary supporting letter to the CAAS in conjunction with the application. Therefore, to avoid unnecessary complications and delay to your application, you are strongly advised to prepare your application for the licence conversion in consultation with your quality department and submit your application through them. Applications involving payment of fees must be accompanied by a crossed-cheque or money order made payable to the CAAS. Your quality department should also be able to advise you on the total fee payable, taking into account the renewal of your licence and the application of any additional ratings that are permitted under protected rights. (Refer Advisory Circular, AC 66-8).

# Submission for Application of Licence Conversion by persons not working with a SAR-145 Approved Organisation

Licence holders not working under a SAR-145 approved organisation may submit their application for licence conversion directly to the CAAS. Such persons can refer to the guidance document – Guidance to Complete SAR-66 Licence Application Form – for instructions on the use the form. They can seek further advice from the CAAS via the contact numbers or email addresses listed on the front page of the guidance document.



## SAR Section 7 Licence Holders

What will happen to my SAR Section 7 licence when SAR-66 is implemented?

Until 31 December 2008, your employer may continue to provide certification authorisations to you based on your SAR Section 7 licence. The SAR Section 7 licence will be phased out gradually over a 2-year period. From 1 January 2009, you must hold a SAR-66 licence before your employer may provide you such certification authorisations.

Can I apply for conversion to a SAR-66 licence if my SAR Section 7 licence is not due for renewal yet?

In order to facilitate an orderly transition, we seek your cooperation in applying for conversion only when you meet any of the conditions stated under the heading 'Criteria for Conversion to a SAR-66 Licence' in this booklet.

Do I continue to use the usual SAR Section 7 licence renewal form to renew my existing licence?

The SAR Section 7 licence renewal form will be superseded by the SAR-66 licence application form, CAAS(AW)01A, Revision R3, dated 01/07. By ticking against the box 'SAR-7 to SAR-66 Licence Conversion' in Section 2 of this form, it would be deemed that you are requesting for the renewal of your existing SAR Section 7 licence (if it is expiring in 3-month time); and, simultaneously, its conversion to a SAR-66 licence. Of course, the tick against this same box will be taken to mean an application for conversion to a SAR-66 licence if the existing SAR Section 7 is not expiring in 3-month time.

Can I apply for the renewal of my existing SAR Section 7 licence online?

The SAR Section 7 renewal online feature is no longer available as such application must only be made using the SAR-66 Licence Application Form which must be submitted by hand or mail to the CAAS.

#### How could I renew my SAR-66 licence?

If you are already holding a SAR-66 licence, you may renew your licence online or submit a paper application to CAAS using the SAR-66 Licence Renewal Form, CAAS(AW)01B.



If I am submitting my SAR Section 7 licence renewal cum SAR-66 licence applications through my quality department, how could I pay the necessary fees to CAAS?

You can submit a crossed-cheque or money order made payable to the CAAS together with your application through your quality department. Your quality department should be able to advise you on the exact fees payable.



What are the fees payable for the various options of applications applicable to the SAR-66 licence?

The fees payable are as follows:

(i)	Initial issue (basic licence plus up to one type rating	- \$132
(ii)	Renewal of SAR-66 licence	- \$132

- (ii) Renewal of SAR-66 licence
- Inclusion of each additional type rating (iii)
- Removal of (basic and/or type) licence limitations - No Charge (iv)
- No Charge (v)Inclusion of another basic category or sub-category - No Charge
- SAR Section 7 to SAR-66 licence conversion (vi) Note: The licence renewal fee of \$132/- is payable if the licence conversion application submitted is also within the licence renewal period.
- (vii) Updating of personal particulars other than licensing details No Charge

All licence fees are subject to regular review and may be adjusted accordingly.

Do I need to attain further qualifications to qualify for conversion from a SAR Section 7 licence to a SAR-66 licence?

All SAR Section 7 licence holders will automatically qualify for a SAR-66 licence, but limitations may be applied on the replacement SAR-66 basic licence and the type rating(s), to reflect equivalent privileges on their existing SAR Section 7 licence. Licence holders who do not wish to qualify for privileges beyond their existing SAR Section 7 licence are not required to attain further qualifications for the purpose of seeking conversion to a SAR-66 licence.

If I am holding a limited SAR-66 licence, is there a deadline for me to convert to a full SAR-66 licence?

There is no deadline for you to convert a limited SAR-66 licence to a full SAR-66 licence. However, holders of limited SAR-66 licence are strongly advised to work towards attaining a full SAR-66 licence in order to remain relevant to the industry.

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Will my SAR Section 7 aircraft type ratings be transferred to the SAR-66 licence?

At the point of conversion, all aircraft type ratings on your SAR Section 7 licence will be transferred to the SAR-66 licence, subject to limitations, if applicable.

What limitations will be imposed on my converted SAR-66 licence?

There are essentially two kinds of limitations that may be applied to a SAR-66 licence on conversion from a SAR Section 7 licence - the basic licence limitations and the type rating limitations.

To illustrate how limitations may be applied, let us take for example, a SAR Section 7 Airframe and Engine (A&C) licence with ratings on Boeing B747-400 Airframe and PW4000 Engine. Unless the licence holder has successfully completed the SAR Section 7 vs. SAR-66 Category B1 Basic Conversion Course (BCC), his or her licence will be converted to a SAR-66 Category B1 basic licence with limitations against <u>electrical power generation and distribution systems</u>, <u>electrical systems</u>, <u>and limited avionic line replaceable units (LRUs)</u>. These limitations will be annotated against the basic licence (or (sub)category) as limitation index numbers, which in this case would be 1, 2, and 3. (Refer AC 66-4 Index of Licence Limitations for the list of possible limitations and their corresponding index numbers). The same licence limitation index numbers would also be applied on the type rating, which is B747-400(PW 4000) B1 in this example.

The table below gives an idea of the limitations on a SAR-66 licence after conversion from a typical SAR Section 7 licence without additional qualifications.

	SAR Section-7 Licence (by category)	After conversion to SAR-66 Licence	Limitation(s) against licence (Limitation index numbers are provided in parentheses)
(i)	A only	B1	Excluding engine (5); Excluding electrical power generation and distribution systems (1); Excluding electrical systems (2); and Excluding limited avionic line replaceable units (3).
(ii)	C only	B1	Excluding airframe (4); Excluding electrical power generation and distribution systems (1); Excluding electrical systems (2); and Excluding limited avionic line replaceable units (3).
(iii)	A&C	B1	Excluding electrical power generation and distribution systems (1); Excluding electrical systems (2); and Excluding limited avionic line replaceable units (3).
(iv)	E only	B2	Excluding instrument, autopilot, flight director, INS/IRS, and flight management systems (6); and Excluding radio communications, audio, radio navigation, global positioning, weather radar and radio altimeter, and DME and ATC transponder systems (7)
(v)	I only	B2	Excluding electrical power generation and distribution systems (1); Excluding electrical systems (2); and Excluding radio communications, audio, radio navigation, global positioning, weather radar and radio altimeter, and DME and ATC transponder systems (7)
(vi)	R only	B2	Excluding electrical power generation and distribution systems (1); Excluding electrical systems (2); and Excluding instrument, autopilot, flight director, INS/IRS, and flight management systems (6)
(vii)	EI or IR or ER	B2	Excluding the privileges related to the shortfall category forming the Category B2 components – the SAR Section 7 E,I and R trades
(viii)	EIR	B2	No limitations
(ix)	E only or any combination with an E category	B1	Excluding airframe (4); and Excluding engine (5)

How could I qualify for the removal of the limitations against my SAR-66 Category B1 basic licence?

To qualify for the removal of limitations against a Category B1 basic licence, you must do the following in sequential order:

- (i) Pass the full complement of SAR Section 7 A&C basic examination subjects. (Refer Advisory Circular, AC 66-3 Table 2); and
- (ii) Successfully complete an approved SAR Section 7 vs. SAR-66 Category B1 Basic Conversion Course (BCC).

On what basis does CAAS determine the limitations to be applied when converting a SAR Section 7 licence to a SAR-66 licence?

The equivalent SAR-66 basic licence and applicable limitations may be derived from the following relationships:

SAR-66 Category B1 = SAR Section 7 Categories (Airframe + Engine) + Electrical power generation and distribution systems + Electrical systems + Limited Avionics LRUs.

SAR-66 Category B2 = SAR Section 7 Categories (Electrical + Instruments + Radio).

From these relationships, therefore, an existing SAR-7 Airframe and Engine (A&C) licence will be converted to a SAR-66 Category B1 basic licence with limitations against 'electrical power generation and distribution systems', 'electrical systems' and 'limited avionics LRUs'. Similarly, an existing SAR-7 Electrical and Instruments (E & I) licence will be converted to a SAR-66 Category B2 basic licence with limitations against 'Radio'. The same limitations would also be applicable to the type ratings on the licence.

As a SAR Section 7 A&C licence holder, how could I qualify for the removal of the limitations against my SAR-66 Category B1 type rating?

You must successfully complete the following in sequential order:

- (i) the BCC;
- (ii) the SAR Section 7 vs. SAR-66 Category B1 type differences course on each specific aircraft; and
- (iii) the structured practical training following the differences course in subparagraph (ii).

Note: A structured OJT of at least  $3^{1/2}$  months on the specific aircraft type in the shortfall mechanical category is necessary if you do not already hold a full SAR Section 7 A&C licence.

How could I qualify for the removal of limitations against my SAR-66 Category B2 basic licence?

To qualify for the removal of limitations against a Category B2 basic licence, you only need to pass the full complement of SAR Section 7 E, I and R basic examinations subjects. Refer Advisory Circular, AC 66-3, Table 3.

As a SAR Section 7 E&I licence holder, how could I qualify for the removal of the SAR-66 Category B2 type rating limitations?

You must successfully complete or pass the following in sequential order: (i) the SAR Section 7 Radio basic examination, Paper R11;

- (ii) the Radio type course on the specific aircraft type;
- (iii) the structured practical training following the Radio type course in subparagraph (ii); and
- (iv) the structured OJT on Radio systems on the specific aircraft type

Note: Typically, a structured OJT of at least  $3^{1/2}$  months on the specific aircraft type in the shortfall avionic category/categories is necessary if you do not already hold a 'full' SAR Section 7 E,I & R licence.

For how long more will the SAR Section 7 basic examinations be available?

The SAR Section 7 basic examinations will be available until October 2010.

What will happen if I cannot pass the necessary SAR Section 7 basic examinations by October 2010 to qualify for the removal of limitations?

You may continue to hold the converted SAR-66 licence with limitations indefinitely.

Can I qualify for a SAR-66 Category C licence if I do not hold the equivalent of a full SAR-66 Category B licence?

Yes, during the transition period, it is possible for CAAS to grant you a Category C licence provided:

- (i) Your application is supported by your SAR-145 approved maintenance organisation; and
- (ii) You must be holding a dual-category SAR Section 7 licence for at least 3 years.



# New Licence Applicants

Where can I obtain a copy of the SAR-66 licence application form, Form CAAS(AW)01A?

You can download it from the CAAS website at www.caas.gov.sg or obtain a copy of it from the following address:

Licensing & Examinations Section Airworthiness/Flight Operations Division Civil Aviation Authority of Singapore 4<sup>th</sup> Storey, North Finger Pier Unit #047-029 Singapore 819643

How and where can I submit my application for a SAR-66 licence?

You can submit your application for a SAR-66 licence by hand or by mail to the above address.

How can I qualify for a SAR-66 licence?

To qualify for a SAR-66 licence, you must pass the necessary examinations and have some maintenance experience. A minimum of 3 – 5 years of relevant practical maintenance experience on operating aircraft is necessary before you can qualify for the appropriate SAR-66 licence. You can refer to the SAR-66 for further details.

I have already begun my apprenticeship under the SAR Section 7 system, should I switch to the SAR-66 system or remain on the existing system?

The SAR Section 7 examinations will be available until October 2010 to cater to situations like yours.

If you anticipate that you are unable to complete the necessary SAR Section 7 examinations by October 2010, you are encouraged to consider switching to the SAR-66 licensing system.

I have passed some SAR Section 7 basic examinations. If I switch to the SAR-66 examinations, can I claim credits for those SAR Section 7 examinations that I have passed?

If you are seeking to qualify for a SAR-66 Category A licence, your SAR Section 7 examination credits can be used to qualify for some SAR-66 examination modules. Details on the possible credits for Category A licence can be found in Advisory Circular, AC 66-3, Table 1.

If you are seeking to qualify for a limited SAR-66 Category B1 licence, you will need to pass all the relevant SAR Section 7 basic examinations required for the A&C categories. (To qualify for a full SAR-66 Category B1 licence, you will also have to successfully complete the SAR Section 7 vs. SAR-66 Category B1 BCC).

If you are seeking to qualify for a full SAR-66 Category B2 licence, you will need to pass all relevant SAR Section 7 basic examinations required for the E,I and R categories.

Under the SAR-66 licensing system, will CAAS issue a Category B licence that has no type rating?

Yes, but CAAS will consider issuing a basic licence with no type rating only if the applicant qualifies for a full Category B1 or B2 basic licence. However, applicant must note that a basic licence alone does not qualify the licence holder for the certifying privileges related to a Category B licence.



How will the implementation of SAR-66 affect the recognition of RSAF Senior Technicians' experience accorded under Airworthiness Notice AN B11?

The 2-year experience credit granted to RSAF's Qualified Senior Technician under Airworthiness Notice AN B11 remains applicable for persons seeking a SAR-66 licence that is equivalent to the existing SAR Section 7 licence.

How will the implementation of SAR-66 affect the examination credits that may be granted under Airworthiness Notice, AN B12 to graduates of aeronautical engineering diploma programmes conducted by the local polytechnics?

The implementation of SAR-66 will not affect the recognition of SAR Section 7 examination credits as provided for under the provision of Airworthiness Notice AN 12. Students seeking SAR-66 licence should pass all outstanding SAR Section 7 papers by October 2010.

Will CAAS consider allowing polytechnic students, who are covered under Airworthiness Notice AN12, more time to pass the outstanding SAR Section 7 examinations since most of them will be serving National Service upon graduation?

CAAS may take into consideration the number of examination sessions missed while the student is serving NS and provide extra examinations to the affected individuals accordingly. Such make-up examinations will only be available until October 2012 upon request by affected individuals only.



#### Other Issues

How will the change from SAR Section 7 to SAR-66 affect the authorisation of certifying staff?

The principle of authorising certifying staff based on their basic licence and rating privileges must be absolutely complied with from 1 January 2009 when all the SAR Section 7 licences have been completely converted to SAR-66. In the period when the licence conversion process is in progress, SAR-145 approved maintenance organisations can continue to authorise staff based on their SAR Section 7 licence privileges and company authorisation system previously accepted by CAAS. However, once the individual has been issued a SAR-66 licence, the SAR-145 approved organisation must grant certification authorisations to the individual in accordance with the privileges endorsed on the basic licence and ratings on it. Information on certification authorisations for licence holders are provided in Advisory Circulars, AC 66-8 and AC 66-9.

If I am working in base maintenance, is it relevant for me to apply for a SAR-66 Category B licence which is essentially a licence for line maintenance as described in the title assigned to this licence – Line Maintenance Certifying Engineer?

The SAR-66 Category B licence shall be the basis for competent base maintenance staff to provide task sign-offs in support of the issue of the certificate of release to service of an aircraft by the Category C licence holder following base maintenance. Existing SAR Section 7 licence holders working in base maintenance must, therefore, also convert their existing SAR Section 7 licence to a SAR-66 licence.

With SAR Section 7 and SAR-66 licensing systems being effective during the transition period, who may be appointed by the SAR-145 approved organisation to certify the CRS-SMI – the SAR Section 7 or the SAR-66 licence holder?

Until 31 December 2008, maintenance organisations may choose to use the fivesignatory format of certifying the CRS-SMI (one signature for each applicable SAR Section 7 category – ACEIR), or the single signatory format (one SAR-66 Category C) after base maintenance of aircraft. The SAR-145 approved organisation must ensure that the single signatory release by Category C licence holder is fully implemented by 1 January 2009.

Photographs courtesy of SIAEC, SASCO and ST Aerospace.

