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## Council of Scientific and Industrial Research NATIONAL AEROSPACE LABORATORIES P.B. No.1779, HAL Airport Road, Kodihalli, Bengaluru – 560 017

#### Advt. No. 03/2023

#### **APPLY OFFLINE ON OR BEFORE 12.05.2023**

(Website: www.nal.res.in)

National Aerospace Laboratories (NAL) is a premier research laboratory under the Council of Scientific and Industrial Research (CSIR). In addition to Research, Development and Technology Programmes in Aerospace, CSIR-NAL is actively involved in supporting the National Aerospace Programmes of ADA, DRDO, ISRO, HAL and IAF. Further, CSIR-NAL has a strong programme in Civil Aviation including the nationally important project of design and development of a multirole Light Transport Aircraft (SARAS Mk2). CSIR-NAL is also exploiting several aerospace technologies into spin-off industrial applications. It has excellent facilities in all the aerospace disciplines.

NAL is looking for engagement of Specialist Consultant for different activities of Civil Aircraft Projects.

Interested persons, fulfilling the eligibility criteria may apply in the prescribed proforma together with copies of certificates, testimonials and forward the same to Administrative Officer, CSIR-NAL, Bengaluru. Completed applications in all respects only will be entertained.

Your selection will be based on the details entered in the Offline Application Form only.

### SPECIALIST CONSULTANT IN THE AREA OF POWER PLANT AND FUEL SYSTEM FOR CIVIL AIRCRAFT:

**Qualification:** M.E/M.Tech (Aerospace)

#### Experience:

- 1. At least 20 years of experience of engine mounting and maintenance schemes, preliminary sizing of nacelle, intake ducts, oil cooler ducts, selection of engine ancillaries and LRUs such as oil cooler, vibrations isolators, preliminary architecture, layout and sizing of fuel system components, fuel requirement calculations, preliminary layout of wing tank selection of APU. Layout preparation and certification flight tests.
- 2. The consultant should have experience in maintenance philosophy and recommendations of various power plant ancillaries.
- 3. Knowledge of airworthiness practices in India including FAR 25.
- 4. Must have sound knowledge of airworthiness certification requirements and aircraft certification standards like FAR-25, MIL and Defence.
- 5. Must have worked in two or more aircraft design programs.
- 6. The consultant should have worked for aircraft OEM of international repute and experienced in providing consulting services in design evaluation.
- 7. The consultant should have received recognition in his field by way of awards and certificates from the industry.

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8. The consultant should have experience certifying aircraft to the FAR Part 25 regulations or equivalent and be familiar with the compliance requirements. Any experience as Certification Verification Engineer (CVE) in aircraft projects would be an added advantage.

#### Scope of work:

- 1. Review the work carried in the areas of preliminary design of power plant and fuel system design.
- 2. Review of the engine and power plant selection for the RTA project.
- 3. Knowledge of engine equipment's, maintainability, accessibility, literature survey and documentation skills, to review/assist in power plant and fuel system (PPFS) committee in PDP phase of RTA.
- 4. To review/assist in Airworthiness Certification related activities of regional transport aircraft (Airframe/Mechanical Systems/Power plant and Fuel System)
- 5. Evaluation of design concepts of parts and assemblies of fuel system and LRUs and review the architectural layout for all PPFS activities.
- 6. Generation and review of project reports as in charge for setting up the committee meeting for the RTA.
- 7. Guide the PPFS design team for design consideration aspects of tooling, manufacturing, surface protection, Maintenance & accessibility.
- 8. Guide in detail design phase PPFS components to conform to NAL design manuals and industry standard practices in part and assembly drawings and models in PLM environment for regional transport aircraft project.
- 9. Interact with regulatory authorities such as CEMILAC/DGCA/DGAQA as and when required along with RTA and Saras Mk2 teams.
- 10. Review the work and guide the design team in writing test schedules for conducting required certification tests.
- 11. Review the work and guide design team to complete the work in the area of detail design, manufacturing and assembly of power plant and fuel system.
- 12. Identifying and analyses critical design drivers and parameters considering aspects like strength, stiffness, damage tolerance, manufacturing, assembly and maintainability for PPFS parts.

#### **Deliverables:**

Consultant is expected to review independently the design and analysis calculations carried out by CSIR-NAL and provide solutions/recommendations to address specific design issues. All the solutions and recommendations to be submitted as a consolidated report.

**<u>Duration:</u>** 6 months extendable upto12 months after review by the Competent Authority

Remuneration: Rs. 70,000/- to Rs.90,000/- per month

Number of Consultant: 1 (One)

#### **GENERAL CONDITIONS**

- 1. The Consultant position is open only to Indian Nationals/Overseas citizens of India.
- 2. The engagement will be in the CSIR National Aerospace Laboratories (NAL), Bengaluru, under the Council of Scientific & Industrial Research (CSIR) which is an Autonomous Body under Ministry of Science & Technology, Govt. of India.
- 3. The engagement of Consultant is for temporary duration of 6 months extendable upto 12 months after review by the Competent Authority.
- 4. Age should not be more than **64 years**, will be reckoned as on last date for receipt of applications.

- 5. Relaxation: The qualifications, age and experience can be relaxed in the case of exceptionally meritorious candidates with the approval of DG, CSIR/Competent Authority.
- 6. The period of experience in a discipline/area of work, where prescribed, shall be counted with effect from the date of acquiring the prescribed minimum educational qualifications for the post.
- 7. As the Screening/Shortlisting of applications will be done on the basis of information furnished through the Offline application form by the applicants, it is necessary that only accurate, full and correct information is furnished by the applicants. Furnishing of wrong/false information will be a disqualification and CSIR-NAL will <a href="NOT">NOT</a> be responsible for any of the consequences of furnishing such wrong/false information.
- 8. The decision of CSIR-NAL in all matters relating to eligibility, acceptance or rejection of applications, mode of selection will be final and no enquiry or correspondence will be entertained in this connection from any individual or agency on behalf of the candidate.
- 9. Canvassing in any form and/or bringing in any influence political or otherwise will be treated as a disqualification for the post.
- 10. In the event of engagement of the Consultant, the Consultant has to execute an agreement in the format on Non-judicial stamp paper.
- 11. Eligible candidates may download the application form given below (given at the end of full advertisement). Application form duly filled in together with recent passport size photograph, copies of matriculation / Degree and above, Experience and certificate with reference to nature of work carried out etc., should be sent in a sealed cover superscribing "Application for the Specialist Consultant in the area of Power Plant and Fuel System for Civil Aircraft Advt. No. 3/2023 ON OR BEFORE 12.05.2023 addressed to:

The Administrative Officer, National Aerospace Laboratories P.B.No.1779, HAL Airport Road Kodihalli, Bengaluru – 560 017 (Karnataka).

INTERIM ENQUIRIES WILL NOT BE ENTERTAINED

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# (Council of Scientific and Industrial Research) NATIONAL AEROSPACE LABORATORIES BENGALURU – 560 017

Affix a signed copy of your recent passport size photograph

#### **APPLICATION FORM**

**IMPORTANT**: This application form duly completed in the candidate's own handwriting or neatly typed must reach THE SR. CONTROLLER OF ADMINISTRATION, NATIONAL AEROSPACE LABORATORIES, P.B.No.1779, AIRPORT ROAD, KODIHALLI, BENGALURU - 560017 on or before 12.05.2023

1.	Advertisement No.	5.50	3/2023	
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2. Post SPECIALIST CONSULTANT IN THE AREA OF POWER PLANT AND FUEL SYSTEM FOR CIVIL AIRCRAFT

3. Name of the candidate	
(in Block Letters)	
4. Sex (Male / Female)	
5. Father's Name	
6. Nationality (mention by birth / domicile)	
7. Present Postal Address (for communication purpose)	Pin Code
8. Permanent Address	
	Pin Code
	Tel/Mobile No

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				YEARS	MONTH	DAYS			
	11. Educational/Professional Qu (Enclose documentary proof)			alification etc, commencing from SSC/10 <sup>th</sup> Std onwards					
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14.	Particulars of close relatives: working in NAL, if any	Name	<del>)</del>	:				
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16.	. Whether dismissed from service from any other Institution / Office or debarred by the Public Service Commission, YES NO , if yes, give details							
17.	ENCLOSURES: (Please tick the the serial number)	approp	riat	e box and arrang	e the enclosure	es as per		
			5.	Community Cer	tificate			
1.	SSLC/10 <sup>th</sup> Std Certificate (Proof of DOB)		6.	Experience Cer	tificate			
2.	12 <sup>th</sup> Std. Certificate		7.	Knowledge of C	omputer			
_				Applications				
3.	Degree/Diploma		8.	Others				
4.	Degree/Diploma Marks sheets (All semesters/Years)							
	DECLARATION							
I hereby declare that the information given above is correct, true to facts and nothing has been concealed / distorted. I am aware that, if at any time I am found to have concealed / distorted any information, my candidature/appointment is liable to be summarily terminated without notice.								
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