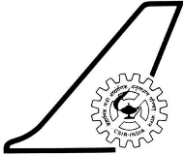


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Council of Scientific and Industrial Research
NATIONAL AEROSPACE LABORATORIES
P.B. No.1779, HAL Airport Road, Kodihalli, Bengaluru – 560 017

Advt. No. 02/2022

APPLY OFFLINE ON OR BEFORE 11.03.2022
(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 SARAS MK-II Aircraft.

Interested persons, fulfilling the eligibility criteria may apply in the prescribed proforma together with copies of certificates, testimonials and forward the same to Sr. Controller of Administration, 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.

I. SPECIALIST STRUCTURE DESIGN CONSULTANT:

Qualification and Experience: BE/B.Tech in Mechanical, Aerospace, Aeronautical or Equivalent. A minimum of 25 years of experience in the Airframe detail design, engineering, DFMA concepts and application for transport aircrafts.

Specialisation: Detail design and engineering of aircraft cabin door and fuselage structure.

Duration: One year extendable for one more year after review..

Remuneration: Rs. 75,000/- to Rs.1,00,000/- per month

Number of Consultant:1 (One)

Job Requirements:

I. Cabin Door Design for SARAS Mk-II

- a) The Structural Design Consultant should mentor and guide team to Design of Cabin Doors conforming to FAR 23 compliance requirements.
- b) The Cabin doors to be designed are given below
 1. Cargo door
 2. Emergency Doors
 3. Bail-out door
 4. Pax door

- c) Evaluation of design concepts of parts and assemblies of door structure and its opening, handle operation, latching and locking mechanisms and review structural layouts for all indicated doors
- d) Verification of design schemes related to hinges, lift mechanism, Dampener (Weight Compensation) and hand rails to respective cabin doors
- e) Identifying and analyse critical design drivers and parameters considering aspects like strength, stiffness, damage tolerance, manufacturing, assembly and maintainability for cabin doors
- f) Guide the cabin door design team to design considering aspects of tooling, manufacturing, surface protection, Maintenance & accessibility considerations

II. Fuselage Detail Design for SARAS Mk-II

- a) Guide in detail design phase airframe components to conform to NAL design manuals and industry standard practices in part and assembly drawings and models in PLM environment
- b) Participate in weight reduction campaign
- c) Guide in arriving at modular design concepts and integration
- d) Guide design team for compliance requirements and documentation

Deliverable:

Submit report on activities listed in Job Requirements

II. SPECIALIST CONSULTANT FOR NACELLE AND AIRFRAME DESIGN ACTIVITIES:

Qualification and Experience: Graduate in engineering (BE/B.Tech in Mechanical/Aeronautical Engg.) with not less than 30 years of professional experience in the aircraft design center/Bureau in the following domain experience.

- Detail design of airframe components and assembly of nacelle system.
- Design and development of PI check and Iron Bird facilities.
- Design and development of test rigs for conducting certification tests of airframe assembly.
- Must have sound knowledge of airworthiness certification requirements and aircraft certification standards like FAR-23/25, MIL and Defence.
- Knowledge of airworthiness practices in India including DDPMAS.
- Must have worked in two or more aircraft design programs.

Duration: One year extendable for one more year after review.

Remuneration: Rs.75,000/- to Rs.1,00,000/- per month

Number of Consultant:1 (One)

Job Requirements for Specialist Consultant:

- Review the work and guide design team in the area of detail design of Nacelle system, airframe detail design and installation LRUs in the Nacelle.
- Review the work and guide design team to complete the work in the area of detail design, manufacturing and assembly of Mechanical Flight Control Systems.
- Co-ordinate with work centers of part manufacturing and assembly parts of Saras Mk2 along with design and manufacturing teams.
- Review the work and guide the design team in writing test schedules for conducting required certification tests.
- Interact with regulatory authorities such as CEMILAC/DGCA/DGAQA as and when required along with Saras Mk2 teams.

III. SPECIALIST CONSULTANT FOR BRAKE MANAGEMENT DESIGN ACTIVITIES:

Qualification and Experience: Post Graduate in engineering (ME/M.Tech in Mechanical/Aeronautical Engg.) with not less than 30 years of professional experience in the aircraft design center/Bureau in the following domain experience.

- Detail design of Brake Management System (BMS) with digital antiskid system for aircraft.
- Aircraft integration and Conducting ground trials for fine tuning the BMS controller.
- Design and development of actuators for aircraft.
- Must have sound knowledge of airworthiness certification requirements and aircraft certification standards like FAR-23/25, MIL and Defence.
- Knowledge of airworthiness practices in India including DDPMAS.
- Must have worked in two or more aircraft design programs.

Duration: One year extendable for one more year after review.

Remuneration: Rs.75,000/- to Rs.1,00,000/- per month

Number of Consultant:1 (One)

Job Requirements for Specialist Consultant:

- Review the work and guide design team in the area of detail design of Brake Management System (BMS) with digital antiskid system, integration on aircraft and conducting ground taxi trials for fine tuning the controller.
- Review the work and guide design team to complete the work in the area of detail design, manufacturing, assembly and qualification testing of actuators.
- Co-ordinate with work centers of part manufacturing and assembly parts of Saras Mk2 along with design and manufacturing teams.
- Review the work and guide the design team in writing test schedules for conducting required certification tests.
- Interact with regulatory authorities such as CEMILAC/DGCA/DGAQA as and when required along with Saras Mk II teams.

IV. SPECIALIST CONSULTANT FOR TOOL DESIGN ACTIVITIES:

Qualification and Experience: Graduate in engineering (BE/B.Tech in Mechanical/Production Engg.) with not less than 25 years of professional experience in the field of Tool Design in an Aircraft Industry. The candidate must have worked in the Tool Engineering Department in an Aircraft Industry and conversant with AutoCAD drawings, CATIA modeling & Tool Design standards.

- Generation of Tool Design layouts and Procedures.
- Design and development of ICY gauges, Aircraft Assembly Jigs and Fixtures
- Design and development of Ground Handling Equipment (GHE) for Airframe Assembly.
- Must have sound knowledge of tool design certification requirements and aircraft certification standards (CEMILAC/DGAQA) and Tolerance criteria.

Duration: One year extendable for one more year after review.

Remuneration: Rs.75,000/- to Rs.1,00,000/- per month

Number of Consultant:1 (One)

Job Requirements for Specialist Consultant:

- Review the work and guide the Tool design team in the area of Tool design for Saras Mk 2 aircraft Sub-Assembly & Assembly Jigs and fixtures.

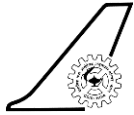
- Review the work and guide Tool design team to complete the work in the area of Tool Design, CAD Modelling, Detail Drawing, Inspection, Jig Setting, Manufacturing, Assembly and certification of Jigs and Fixtures.
- Co-ordinate with work centers/vendors for Tool design, Jig setting & Certification, Manufacturing and Assembly of components for Saras Mk2 along with design and manufacturing groups.
- Review the work and guide the Tool design team in preparing Assembly sequence procedures required for Manufacturing, Jig setting, Assembly and Integration of components and Certification.
- Interact with regulatory authorities such as CEMILAC/DGAQA as and when required along with SARAS Mk2 groups.
- Co-ordination with design groups within the organisation for design clarification, snag clearance, detail drawing check, Inspection and Acceptance of tools.

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 is for temporary duration of One year extendable for one more year after review.
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 **NOT** 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 post of** Advt. No. 2/2022 **ON OR BEFORE 11.03.2022** addressed to:

**The Sr. Controller of Administration
National Aerospace Laboratories
P.B.No.1779, HAL Airport Road
Kodihalli, Bengaluru – 560 017 (Karnataka).**

INTERIM ENQUIRIES WILL NOT BE ENTERTAINED



(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 11.03.2022

1. Advertisement No. : **2/2022**
2. Post : **SPECIALIST CONSULTANT FOR**

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 <input type="text"/> Tel/Mobile No. _____, E-mail: _____
8. Permanent Address	Pin Code <input type="text"/> Tel/Mobile No. _____

09. Date of Birth (As per Matriculation / SSLC certificate)		□□	□□	□□□□			
		DAY	MONTH	YEAR			
10. Age (As on the closing date of application)		□□	□□	□□			
		YEARS	MONTH	DAYS			
11. Educational/Professional Qualification etc, commencing from SSC/10th Std onwards (Enclose documentary proof)							
Examination Passed	Year of passing	Marks obtained / percentage of marks			Class / Grade obtained	Duration of Degree/ Diploma Course	Board / University / Institution
		Max Marks	Marks obtained	Aggregate %age			
12. Experience:							
Period		Name of Organisation* & Place	Designation/ Post Held	Gross Pay Drawn Rs.	Permanent/ Temp. Post		
From	To						

Note : * Please indicate whether the served Organisation belongs to Govt./ PSU or Pvt. Also enclose copies of certificates/testimonials etc in support of proof of experience.

13. Any other details :

14. Particulars of close relatives : Name :
working in NAL, if any
Designation :
Division :
Relationship :

15. Are you under any bond/contractual obligation to serve Central / State Government / PSU / Autonomous or any other body / organization, YES NO

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 appropriate box and arrange the enclosures as per the serial number)

- | | | | |
|--|--------------------------|--|--------------------------|
| 1. SSLC/10 th Std Certificate
(Proof of DOB) | <input type="checkbox"/> | 5. Community Certificate | <input type="checkbox"/> |
| 2. 12 th Std. Certificate | <input type="checkbox"/> | 6. Experience Certificate | <input type="checkbox"/> |
| 3. Degree/Diploma | <input type="checkbox"/> | 7. Knowledge of Computer
Applications | <input type="checkbox"/> |
| 4. Degree/Diploma Marks sheets
(All semesters/Years) | <input type="checkbox"/> | 8. Others | <input type="checkbox"/> |

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.

Place: _____

Date: _____

Signature of the candidate