



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

**Advt. No.3/2021**

**APPLY ONLINE BEFORE 21<sup>st</sup> MAY 2021**

(Website: [www.nal.res.in](http://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 many 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). 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 bright and highly motivated Technical Staff to participate in the exciting task of Aerospace R&D, Technology Development and related applications:

Please go through the full text of the advertisement on our website: [www.nal.res.in](http://www.nal.res.in) regarding qualifications, job requirements, experience, subjects and Trade etc required for each position.

CSIR-NAL invites Online Application for the following positions. To apply, candidates must fill in our specially designed Electronic Application Form available on our website: [www.nal.res.in](http://www.nal.res.in). There is no application fee for SC/ST/PwD posts.

Please fill the Electronic Online Application Form carefully. The selection will be based on the details entered in the Online Application Form only.

**I. TECHNICAL ASSISTANT (19 Posts) :** Age limit : 28 years.

**Reservation : SC-1, ST-1, OBC-6, PwD-1(VH), PwD-1(HH), EWS-1 & UR-8 (19 Posts)**

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|---|---|
| 1. Pay Level as per VII CPC                             | : `Level 6 in the Pay matrix of 7 <sup>th</sup> CPC |
| 2. Minimum of Pay                                       | : `35400/-  |
| 3. Gross Emoluments<br>(minimum of Pay +DA+HRA+TA etc.) | : `49000/- (Approximate)<br>=====                   |

**1. POST CODE: TA-101/Mechanical (Reserved for OBC-2 & UR-2)  
(4 Posts) :**

**Educational Qualification:** First Class Diploma in Mechanical Engineering / Technology of atleast 3 years full time duration OR atleast 2 years full time duration in cases of lateral admission in Diploma Courses or its equivalent with experience of 2 years in the relevant area / field.

**2. POST CODE: TA-102/Electrical/Electronics & Communication Engineering (Reserved for SC-1, UR-1 & 1 HH\*) (3 Posts) :**

**Educational Qualification:** First Class Diploma in Electronics & Communication Engineering / Technology of atleast 3 years full time duration OR atleast 2 years full time duration in cases of lateral admission in Diploma Courses or its equivalent with experience of 2 years in the relevant area / field.

**\* Note: (Hearing Impairment (HH) – Hearing disability means loss of sixty decibels or more in the better ear in the conversational range of frequencies. (40% to 74%)**

**3. POST CODE: TA-103/Electronics & Instrumentation Engineering (Reserved for OBC-2 & UR-1) (3 Posts) :**

**Educational Qualification:** First Class Diploma Electronics & Instrumentation Engineering / Technology of atleast 3 years full time duration OR atleast 2 years full time duration in cases of lateral admission in Diploma Courses or its equivalent with experience of 2 years in the relevant area / field.

**4. POST CODE: TA-104/Civil Engineering (Reserved for ST-1 & UR-1) (2 Posts) :**

**Educational Qualification:** First Class Diploma in Civil Engineering / Technology of atleast 3 years full time duration OR atleast 2 years full time duration in cases of lateral admission in Diploma Courses or its equivalent with experience of 2 years in the relevant area / field.

**5. POST CODE: TA-105/ Metallurgy/Metallurgical Engineering (Reserved for OBC-1 & EWS-1) (2 Posts) :**

**Educational Qualification:** First Class Diploma in Metallurgy/Metallurgical Engineering / Technology of atleast 3 years full time duration OR atleast 2 years full time duration in cases of lateral admission in Diploma Courses or its equivalent with experience of 2 years in the relevant area / field.

**6. POST CODE: TA-106 / Diploma Or B.Sc. in Computer Science/BCA (Reserved for UR-1 & VH-1\* ) (2 Posts) :**

**Educational Qualification:** First Class Diploma in Computer Engineering / B.Sc in Computer Science / Bachelor of Computer Application / Technology of atleast 3 years full time duration OR atleast 2 years full time duration in cases of lateral admission in Diploma Courses or its equivalent with experience of 2 years in the relevant area / field.

**\* Note: (Visual Impairment (VH) – Low Vision or disability means a person with impairment of visual functioning even after treatment or standard refractive correction but who uses or is potentially capable of using vision for the planning or execution of a task with appropriate assistive devise. (40% to 74%)**

**7. POST CODE: TA-107/Hotel Management (Unreserved) (1 Post) :**

**Educational Qualification:** First Class degree/ Diploma of 3 years full time duration in Hotel Management OR Catering Technology OR Hospitality Management from a recognized Institution of atleast 3 years full time duration OR atleast 2 years full time duration in cases of lateral admission in Diploma Courses or its equivalent with experience of 2 years in the relevant area / field.

## 8. POST CODE: TA-108/B.Sc in Aircraft Maintenance (1-OBC & 1-U) (2 posts)

**Educational Qualification:** First Class B.Sc (Science) in Aircraft Maintenance or Equivalent with 1 year full time professional qualification in the aircraft maintenance / or one year experience in the relevant discipline from a recognized institute/Organization.

**Experience:** 1. Having DGCA AME license CAT (B1) on Light Aircraft and Piston Engine  
2. Having DGCA AME license (B2) Electrical System, Instrument System, Radio & Navigation System.

Working knowledge or experience in a DGCA approved CAR-M / CAR 145 Organization.

**Job Requirement:** To work in Civil aircraft projects. To involve in Aircraft Maintenance and flight operations. To liaise with regulatory authorities.

### II. Technical Officer (1 Post) : Age limit : 30 years.

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| 1. Pay Band as per VII CPC                              | : `Level 7 in the Pay matrix of 7 <sup>th</sup> CPC |
| 2. Pay in the Pay Band                                  | : `44900/-  |
| 3. Gross Emoluments<br>(minimum of Pay +DA+HRA+TA etc.) | : `67000/- (Approximate)<br>=====                   |

### POST CODE: TO-201/APMF (Reserved for EWS) (1 Post) :

**Educational Qualification:** B.E./B.Tech or equivalent in Mechanical Engineering OR equivalent with 55% marks.

**Job Requirement:** process planning, scheduling & costing for various manufacturing activities of Aerospace projects, Maintenance of documents pertaining to various regulatory authorities.

**Desirable:** Exposure in process planning, scheduling and costing activities in an aerospace industry with knowledge of relevant aerospace process and standards desirable.

## III. Senior Technical Officer-1 (2 Posts) (Reserved for OBC-1 & UR-1) Age limit : 35 years.

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| 1. Pay Band as per VII CPC                              | : `Level 10 in the Pay matrix of 7 <sup>th</sup> CPC |
| 2. Pay in the Pay Band                                  | : `56100/-   |
| 3. Gross Emoluments<br>(minimum of Pay +DA+HRA+TA etc.) | : `87000/- (Approximate)<br>=====                    |

### 1. Post Code: STO-1-301/STTD (Reserved for OBC) (1 Post):

**Educational Qualification:** B.E./B.Tech in Aerospace or Aeronautical Engineering with 55% marks and 2 years relevant experience

**Experience:** With minimum of 2 years relevant experience.

**Job Requirement:** To work in the area of Airframe Design, Finite Element Meshing of Aircraft Structural Components in Hypermesh; knowledge to generate 2D/3D CAD models using software like CATIA, AutoCAD and prepare the Manufacturing Drawings. Knowledge in detailed engineering.

**Desirable:** Knowledge in aircraft standard materials, airframe structural components/construction details and strength calculations; experience in FE meshing

using Hypermesh to support NASTRAN structural analysis; Knowledge in manufacturing aspects of aircraft structures using CATIA to support drawing activities.

## **2. Post Code: STO-1-302/ACD (Unreserved) (1 Post):**

**Educational Qualification:** B.E/B.Tech in Mechanical Engineering with 55% marks from a recognized Institution / University with 2 years experience in Aircraft Quality Control, Quality Assurance, Design and Manufacturing standards in Aircraft industry

**Experience:** With minimum of 2 years working experience in Aircraft Quality Control, Quality Assurance, Design and Manufacturing standards in Aircraft industry.

**Job Requirement:** The candidate should assist the quality / Assurance & Airworthiness Group in the preparation of Quality control / certification / documentation and ensure implementation of process improvements. He/She will carry out interaction with the regulatory agencies to meet the certification needs as and when necessary and perform internal quality audits at supplier premises as required.

**Desirable:** Candidate should have first class in Bachelor level (BE/B.Tech) and relevant work experience. Post graduation Diploma courses in quality control / Assurance from reputed Government recognized Institute / Training centres would be preferable. He/She should have at least five year experience in quality control / quality assurance in as established aerospace industry / organization; familiarity with DDPMAS, AFOMS, Aerospace Certification Standard AS9100 Rev D. Awareness of aircraft regulatory standards such as CAR 21, FAR, EASA would be an added advantage.

## **IV. Senior Technical Officer-2 (4 Posts)**

**Age limit : 40 years.**

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| 1. Pay Band as per VII CPC                              | : `Level 11 in the Pay matrix of 7 <sup>th</sup> CPC |
| 2. Pay in the Pay Band                                  | : `67700/-   |
| 3. Gross Emoluments<br>(minimum of Pay +DA+HRA+TA etc.) | : `1,03000/- (Approximate)<br>=====                  |

### **1. Post Code: STO-2-401/C-CADD (1 Post):**

**Educational Qualification:** BE / B.Tech or equivalent with 55% marks in Mechanical Engineering/Production/Industrial Engineering/Aerospace Engineering with 5 years of relevant experience OR MBA with 55% marks after 1<sup>st</sup> Class B.Sc in AME or equivalent with 3 years relevant experience .

**Experience:** 1) Experience in Aircraft maintenance and flight operation 2) AME license CAT (B1) on Light Aircraft and Piston Engine 3) DGCA approved CAR-M/CAR-145 Organization.

**Job Requirement:** To work in civil aircraft projects. To involve in Aircraft Maintenance and flight operations. To liaise with regulatory authorities.

### **2. Post Code: STO-2-402/C-CADD (1 Post):**

**Educational Qualification:** BE / B.Tech or equivalent with 55% marks in Electrical / Electronics & Communication / Aerospace Engineering with 5 years relevant experience. OR MBA with 55% marks after 1<sup>st</sup> Class B.Sc in AME or equivalent with 3 years relevant experience .

**Experience:** Experience in Aircraft maintenance and flight operations and DGCA AME license (B2) Electrical System, Instrumentation system, Radio & Navigation system. Experience in a DGCA approved CAR-~~C~~/CAR 145 organization. Experience on light aircraft fitted with glass cockpit.

**Job Requirement:** To work in civil aircraft projects involves in aircraft maintenance and flight operations and to liaise with regulatory authorities.

### **3. Post Code: STO-2-403/ACD (1 Post):**

**Educational Qualification:** BE / B.Tech in Electronics & Communication Engineering with 55% marks.

**Experience:** With minimum of 5 years working experience in fiber optic sensors & related systems, data acquisition during testing. Proficiency on LabVIEW programming for OXI, cRIO & instrument/hardware control. Knowledge of using RS232, GPIB for autoclave application.

**Job Requirement:** To support the development of structural health monitoring activities using fiber optic sensors & also autoclave operation. Assist in sensor handling, installation on composite structures, instrumentation integration, software development for control, and data acquisition.

### **4. Post Code: STO-2-404/SID (1 Post):**

**Educational Qualification:** BE / B.Tech in Mechanical/Materials Engineering or equivalent with 55% marks.

**Experience:** With minimum of 5 years working experience in mechanical testing of aerospace materials/components and relevant areas, preferably in an aerospace related R&D reputed educational institutes..

**Job Requirement:** To provide technical support in materials and structural testing activities such as 1. Operation/maintenance of hydraulic systems, mechanical test machines, test controllers etc. 2. Strain gage installation, wiring and data acquisition.3. Calibration of load cells / sensors etc.

**Desirable:** Knowledge of understanding and reading engineering component drawings, fits and tolerances, GD&T. Basic knowledge about mechanical properties of materials, design fundamentals etc. Mechanical testing and evaluation of materials/components. Basic knowledge about sensors and data acquisition systems. Basic knowledge in use of computers.

## **I. Benefits:**

1. These posts carry usual allowance i.e., Dearness Allowance (DA), House Rent Allowance (HRA), Transport Allowance (TA) etc. as admissible to the Central Government employees and as made applicable to CSIR. Council employees are also eligible for accommodation of their entitled type as per CSIR Allotment Rules depending upon the availability in which case HRA will not be admissible.
2. In addition to the emoluments indicated against each category of posts, benefits such as reimbursement of Medical Expenses, Leave Travel Concession and House Building Advance are available as per Rules and as made applicable to Council servants.
3. All the Technical Assistants / Technical Officers / Sr.Technical Officer-1 and Sr.Technical Officer-2 are entitled for Career Advancement on the basis of Flexible Complementary Scheme of CSIR as per CSIR service rules 1994.
4. All New Entrants will be governed by the "New Pension Scheme" based on defined Contributions for new entrants recruited in Central Government Services on or after 1-1-2004, as adopted by CSIR for its employees. However, persons selected from other Government Departments / Autonomous Bodies / Public Sector Undertakings / Central Universities having Pension Scheme on Gol pattern will continue to be governed by the existing Pension Scheme i.e. CCS (Pension) Rules, 1972

## **II. AGE LIMIT AND RELAXATIONS:**

1. The date for determining the upper age limit, qualifications and/or experience shall be the closing date prescribed for receipt of Online Electronics Application form **i.e. 21<sup>st</sup> May 2021**
2. The upper age limit is relaxable upto 05 years for SC/ST and 03 years for OBC as per Government of India orders in force only in those cases where the posts are reserved for respective categories, on production of relevant certificate in the prescribed format signed by the specified authority. **OBC Candidates have to produce OBC certificate in Gol format only.**
3. Upper age limit is relaxable upto 5 years for the regular employees working in CSIR Laboratories/Institutes, Government Departments, Autonomous Bodies and Public Sector Undertakings.
4. Relaxation in the upper age limit of 5 years applicable for persons who had ordinarily been domiciled in the Jammu and Kashmir State during the period 1-1-1980 to 31-12-1989 subject to production of a certificate from the District Magistrate in the J&K Division within whose jurisdiction he/she had ordinarily resided or from any other authority designated in this behalf by the Government of J&K to the effect that he/she had ordinarily been domiciled in Jammu and Kashmir State during the period from 1-1-1980 to 31-12-1989.
5. For Widows, Divorced Women and women judicially separated from husbands, the upper age limit is relaxable as per GOI provisions.
  - i) In case of widow, Death Certificate of her husband together with the Affidavit that she has not remarried since.
  - ii) In case of divorced women and women judicially separated from their husbands, a certified copy of the judgment/decree of the appropriate Court to prove the fact of the divorce or the judicial separation, as the case may be, with an Affidavit in respect of divorced women and they have not remarried since.
6. Age relaxation to Physically Handicapped (PH) Persons: Age relaxation of 10 years is allowed (total 15 years for SCs, STs and 13 years for OBCs in respect of the posts reserved for them) to blind, deaf-mute and orthopedically handicapped persons for appointment to Group 'A&B' posts/services as per rules. The persons claiming age relaxation under this sub-para would be required to produce a certificate in prescribed proforma in support of their claims clearly indicating that the degree of physical disability is 40% to 74%. In any case, the appointment of these candidates will be subject to their being found medically fit in accordance with the standards of medical fitness as prescribed by the Government for each individual Group 'A&B' posts to be filled by Direct Recruitment by selection.

## **III. GENERAL CONDITIONS:**

1. These positions are open only to Indian Nationals/Overseas citizens of India.
2. The appointment will be in the CSIR National Aerospace Laboratories (NAL), Bangalore, under the Council of Scientific & Industrial Research (CSIR) which is an Autonomous Body under Ministry of Science & Technology. However, the appointees are liable to be posted in any of the Labs/Institutes of CSIR situated anywhere in India as and when required.

3. A Non-refundable application fee of Rs.100/- (Rupees One Hundred only) is payable separately for each post (candidates belonging to SC/ST/PWD and regular employees of CSIR are exempted from payment of application fee) in the form of online payment.
4. Candidates applying for more than one post should submit separate Online Application form for each post indicating the Category and Post Code along with prescribed application fee and copies of all marks cards, certificates and testimonials separately for each post.
5. 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.
6. In respect of equivalent clause in educational qualifications, if a candidate is claiming a particular qualification as equivalent as per the requirement of the advertisement, then the candidate is required to produce order/letter in this regard, indicating the authority (with number and date) under which it has been so treated. Otherwise, the application is liable to be rejected.
7. If any document/certificate furnished is in a language other than Hindi or English, a transcript of the same duly attested by a Gazetted Officer or Notary is to be submitted.
8. Application from the candidates working in CSIR, Govt. Departments and Public Sector Undertakings will be considered only if forwarded through proper channel within 15 days from the closing date prescribed for receipt of online applications and with a clear certificate that the applicant will be relieved within one month of receipt of appointment order, if selected. **However, Advance copy (Photo copy) of the Online Electronics Application Form together with all certificates & testimonials etc. must be submitted before the closing date.**
9. Persons with Disabilities (PWD) fulfilling the eligibility conditions prescribed under GOI instructions are encouraged to apply.
10. Persons who are not covered under the scheme of reservation for SCs, STs and OBCs and whose family has gross annual income below Rs **8.00 lakh** (Rupees eight **lakh** only) are to be identified as EWSs for benefit of reservation. Income shall also include income from all sources i.e. salary, agriculture, business, profession, etc. for the financial year prior to the year of application. Also persons whose family owns or possesses any of the following assets shall be excluded from being identified as EWS, irrespective of the family income:- i. 5 acres of agricultural land and above; ii. Residential at of 1000 sq ft. and above; iii. Residential plot of 100 sq. yards and above in notified municipalities; iv. Residential, plot of 200 sq. yards and above in areas other than the notified municipalities. The property held by a "Family" in different locations or different places/cities would be clubbed while applying the land. or property holding test to determine EWS status. The term "Family" for this purpose will include the person who seeks benefit of reservation, his/her parents and siblings below the age of 18 years as also his/her spouse and children below the age of 18 years.
11. The application once made will not be allowed to be withdrawn and fees once paid will not be refunded on any count nor can it be held in reserve for any other recruitment or selection process.
12. Incomplete applications (ie., without photograph, unsigned or without application fee, applicable testimonials etc) will not be entertained and will be summarily rejected.

13. Candidates should specifically note that the applications received after the closing date for any reason whatsoever (such as envelopes wrongly addressed, delivered elsewhere, postal delay etc.) will not be entertained by this Laboratory.
14. Any enclosure received separately subsequent to the receipt of the application cannot be connected therewith. No correspondence in this regard will be entertained.
15. Mere fulfilling of minimum prescribed qualifications and experience will not vest any right in a candidate for being called for Skill Test/Interview.

In the event of number of applications being large, Screening Committee CSIR-NAL will adopt its own shortlisting criteria to restrict the number of candidates to be called for Skill test and Written test / interview to a reasonable number by any or more of the following methods:

- i. On the basis of higher educational qualifications than the minimum prescribed in the advertisement.
  - ii. On the basis of higher experience in the relevant field than the minimum prescribed in the advertisement.
  - iii. By holding a Skill test and written test / Interview wherever required.
  - iv. Any other methodology as deemed fit by the Screening Committee.
16. The Laboratory reserves the right to call for Skill test and Written test / Interview only those candidates who in its opinion are likely to be suitable and will not entertain any correspondence in this regard.
17. Only outstation candidates (within India) called for **Written test / Interview only (Sr.Technical Officer-1 and Sr.Technical Officer-2)** will be reimbursed Travelling Allowance (TA) as admissible under rules i.e. a single Second Class Railway Fare (by Mail or Express) each way from their normal place of residence or from the place of undertaking the journey, whichever is nearer to Bengaluru and back on production of proof of journey. For road journeys between stations not connected by rail, the actual bus fare or road mileage at the lowest rate as admissible under rules, will be reimbursed, on production of documentary proof (bus tickets) and provided that the distance covered by road is more than 20 kms each way.
18. CSIR-NAL reserves the right not to fill up a particular post or all the posts, if it so desires. The number of vacancies indicated above may vary at the time of actual selection.
19. The selected candidates will be on probation for a period of one year from the date of taking over charge of the post. The probationary period may be extended or curtailed at the discretion of the Competent Authority. After successful completion of probationary period, they will be considered for confirmation in accordance with the extant rules.
20. The selected candidates will not be permitted to apply for appointment elsewhere or in CSIR-NAL during the probationary period and if they have already applied for any posts in any other organization, they may have to intimate the details of such applications, immediately after joining the Laboratory.
21. As the Screening/Shortlisting of applications will be done on the basis of information furnished through the Online 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. Candidates may register online immediately on seeing the advertisement to avoid last day rush/disappointment.



22. The decision of CSIR-NAL in all matters relating to eligibility, acceptance or rejection of applications, mode of selection, conduct of Skill test and Written test / interview will be final and binding on the candidates and no enquiry or correspondence will be entertained in this connection from any individual or agency on behalf of the candidate.
23. Canvassing in any form and/or bringing in any influence political or otherwise will be treated as a disqualification for the post.

**IV. SELECTION PROCEDURE: For Technical Assistants and Technical Officer:-**

Selection Procedure is at two stages, 1. The candidates as recommended by the Screening Committee will be invited for a Skill test and 2. Those who qualify in the Skill test will be invited for a Competitive Written examination. The Final merit list will be prepared and recommended by the Selection Committee on the basis of the performance of the candidates in the competitive written examination.

(a) The Skill Test will be mainly in the subject area of specialization as advertised. The Skill Test will be at the level of Diploma for Technical Assistant and B.E. for Technical Officer.

(b) Written examination:

There will be three papers. The paper II and paper III will be evaluated only for those candidates who secure the minimum threshold marks (to be determined by the Selection Committee) in paper I.

Mode of Examination	OMR based or Computer based objective type multiple choice examination
Medium of examination	The questions will be set in both English and Hindi except the questions of English language.
Standard of Exam	Diploma courses for Technical Assistant and BE/B.Tech courses for Technical Officer
Total number of questions	200
Total time allotted	3 hour

1) Paper - I (Time allotted – 1 hour)

Subject	No. of Questions	Maximum marks	Negative marks
Mental ability test *	50	100	There will be no negative marks in this paper

\* Mental ability test will be so devised so as to include General Intelligence, Quantitative aptitude, Reasoning, problem solving, situational judgement etc.

2) Paper - II (Time allotted – 30 minutes)

Subject	No. of Questions	Maximum marks	Negative marks
General awareness	25	75	One negative mark for every wrong answer
English language	25	75	

3) Paper - III (Time allotted – 90 Minutes)

Subject	No. of Questions	Maximum marks	Negative marks
Concerned subject	100	300 (three marks for every correct answer)	One negative mark for every wrong answer

**V.** Selection procedure for Sr. Technical Officer-1 and Sr. Technical Officer-2 – Interview only

**INTERIM ENQUIRIES WILL NOT BE ENTERTAINED**