



AERONAUTICAL DEVELOPMENT AGENCY

(An Autonomous Body under Ministry of Defence, Govt. of India)
P.B. No. 1718, Vimanapura Post, Bangalore – 560 017, India

Advt Reference : ADA:ADM:EST:ADV-090 :2013

17 July 2013

ADA is an Autonomous Organization under the Department of Defence Research and Development, Ministry of Defence (MOD), Government of India, entrusted with the design and development of both the Air Force and Naval versions of Light Combat Aircraft (LCA). LCA Programme is a prestigious National Programme with more than 100 major work centres in India contributing to this Programme.

2. ADA invites applications for **PROJECT ENGINEERS (PE) on CONTRACT BASIS** and the current vacancies are indicated in para 4.

3. Qualification, Experience and remuneration will be as under:

Post/ Grade	Minimum Qualification & Experience	Consolidated Remuneration (₹) per month
PE-1	First class Bachelor's degree in Engineering (Up to 4 yrs Exp)	50,000 + DA *
PE-2	First class Bachelor's degree in Engineering (Minimum 4 yrs Exp)	60,000 + DA *
PE-3	First class Bachelor's degree in Engineering (Minimum 8 yrs Exp)	70,000 + DA *

* Dearness Allowance is payable on the consolidated pay @ 50% of DA announced by Central Government for its employees from time to time.

Note: i) Consolidated remuneration as mentioned above will be fixed within a nominated tolerance above or below the indicated amount as per the recommendation of the Selection Committee, based on the performance in the interview.

ii) Candidates will be given weightage in the required experience as given below on account of possessing the following higher qualifications.

Qualification	Weightage
ME/M.Tech/M.S (Engg)	2 years
Ph.D(in Engineering)	3 years

4. Currently vacancies are existing for the following levels of Project Engineers. Essential Qualifications and area of experience required are given below.

SI No	Post Code	Level	No of Posts	Qualification	Experience
1	1.1.1	PE-1	01	Essential Bachelor's degree in Mechanical Engineering. Desirable: M.Tech/ME or equivalent in above discipline	Essential Up to 4 years Experience in - manufacturing processes of aircraft structural components. Desirable: Experience in CAD modeling software.
2	1.1.2	PE-1	01	Essential Bachelor's degree in Mechanical / Aeronautical Engineering. Desirable: ME/M.Tech or equivalent in above disciplines	Essential Up to 4 yrs Experience in Fatigue analysis, MATLAB / Finite element software.
3	1.2.1	PE-2	01	Essential Bachelor's degree in Mechanical/ Aerospace Engineering Desirable: ME/M.Tech or equivalent In above disciplines	Essential Minimum 4 Yrs Experience in- the field of Structural Dynamics / Vibration Testing. Desirable: Experience with commercially available vibration analysis software applicable to aircraft industry.
4	3.1.1	PE-1	03	Essential Bachelor's degree in Aerospace/ Aeronautical Engineering Desirable: M.E. / M.Tech or equivalent in above disciplines	Essential Up to 4 yrs Experience in one or more of the following areas - Aerodynamic design, aerodynamic analysis, grid generation and CFD studies, fluid structure interaction, wind tunnel testing, and prediction of aircraft performance, evaluation of aircraft flight performance and estimation of aircraft stability derivatives. Desirable: Experience in the aerospace industry or academic institution
5	3.2.1	PE-2	01	Essential Bachelor's degree in Aeronautical / Aerospace Engineering	Essential Minimum 4 yrs experience in – one or more of the following areas - aerodynamic design, aerodynamic analysis, grid generation and CFD studies, wind tunnel testing, aircraft performance analysis and flight performance evaluation. Desirable : Experience in an Aerospace industry or academic institution in any of the following areas: a) Multi disciplinary Design Optimization (MDO) studies using Standard MDO frameworks like iSIGHT, Mode Frontier

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					<p>b) Aerodynamic Analysis of a/c configurations using CFD codes and exposure to Pre and post processing software like ICEMCFD, TECHPLOT</p> <p>c) Aircraft Design studies using at least one preliminary design package like RDS, FLOPS, ACSYNTH.</p>
6	4.1.1	PE-1	01	<p>Essential Bachelor's degree in Electronics & Communication / Electrical & Electronics / Computer Science Engineering</p> <p>Desirable: ME/M.Tech or equivalent in above disciplines</p>	<p>Essential Up to 4 Years of Experience in-</p> <p>a) Military Avionic Integration & Functional testing (Cockpit Control and Display, FMS etc)</p> <p>b) Flight Testing /Monitoring and analysis for Avionics System.</p> <p>c) Data Acquisition systems, system design and modeling (Embedded software simulation).</p> <p>d) Protocol/Tools 1553B, RS422, matlab, simulink, Labview, SCADE</p>
7	4.1.2	PE-1	01	<p>Essential Bachelor's degree in Electronics & Telecommunication/ Electronics & Communication / Telecommunication Engineering</p>	<p>Essential Upto 4 Yrs Experience in-</p> <p>a) Radar System & its components like transmitters, receivers, signal processing, Data processing, programming including FPGA & Antennas.</p> <p>(b) Airborne communication system components like transmitters, receivers and signal processors.</p>
8	4.2.1	PE-2	01	<p>Essential Bachelor's degree in Electronics & Communication / Electrical & Electronics/ Electrical / Telecommunication/ Instrumentation Engineering</p> <p>Desirable: ME/M.Tech or equivalent in above disciplines</p>	<p>Essential Minimum 4 years experience in-</p> <p>a) Electronic Hardware Design</p> <p>b) RTL IP Design using VHDL/Verilog and Xilinx FPGA Design Tool</p> <p>c) Graphics Processing Hardware, (GPU) ARM, OpenGL ES</p> <p>d) Ethernet, PCIe high speed interfaces.</p> <p>e) AMBA 2.0/3.0 Bus Architecture</p> <p>f) MATLAB and Basic analog Design</p>

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9	4.2.2	PE-2	01	Essential Bachelor's degree in Electronics & Communication Engineering	Essential Minimum 4 years experience in- a) Avionics Hardware LRU Design, Development and testing. b) Avionics LRU hardware and software testing. c) Acceptance Test Procedures (ATP) and Qualification Test Procedures (QTP) d) Device driver design and Development Desirable: Experience in Avionics Integration Testing
10	4.2.3	PE-2	01	Essential Bachelor's degree in Computer Science Engg / Electronics & Communication / Aerospace Engineering	Essential Minimum 4 Years experience in – a) Development of Test Rigs and Simulators b) Developing / Assembling and using Avionics test Engineers System c) Sensor System Simulation and Flight models Integration for Avionics System
11	4.2.4	PE-2	01	Essential Bachelor's degree in Electronics & Communication Engineering	Essential Minimum 4 years experience in one or more of the following – A. i) Airborne Radar system integration and testing in the ground rigs and airborne platform; ii) RF field like Antennas & Radome EM measurements; iii) Radar Flight Data analysis and simulations; iv) Avionics bus interfaces B. i) Design and Testing of Radar Warning Receivers & EW Systems; ii) RF and signal processing algorithms iii) Development of test rigs and simulators; iv) Avionics bus interfaces C. i) System level EMI/EMC testing Operation of High Power ; ii) Amplifiers and receivers ; iii) Antenna simulation and testing; iv) Testing and integration of Airborne Radio.

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12	5.3.1	PE-3	01	Essential Bachelor's degree in Mechanical Engineering Desirable - M Tech or equivalent in above discipline.	Essential Minimum 8 Yrs Experience in design, development and testing of one or more of the following: a) Solenoid Valves/Non-return Valves/Relief Valves/Pressure Regulators b) Flow throttling valves/Two way- Three way command valves c) Gas and liquid fill and drain valves d) Bellows/Hoses/Gas and Hydraulic Filters e) Hot gas and Cryogenic valves f) Integrated hydraulic and pneumatic modules/systems g) Realization/Testing/Evaluation/ Delivery of Hardware
13	6.1.1	PE-1	01	Essential Bachelor's degree in Engineering in Mechatronics	Essential a) Up to 4 yrs experience in Collaborative Systems, Engineering processes, tools, methods environment. b) Model based design and simulation tools framework such as Matlab /Simulink / Modelica / SysML etc. Desirable: Experience in design of aircraft systems or related area.
14	7.1.1	PE-1	02	Essential Bachelor's degree in Electrical & Electronics/ Electrical / Electronics & Communication / Instrumentation Engineering Desirable :ME/ M.Tech/ or equivalent in above disciplines	Essential Up to 4 years experience in one of the following - a) Flight control system Development / Evaluation b) Embedded system Evaluation c) Hardware-In-Loop Simulation
15	7.1.2	PE-1	02	Essential Bachelor's degree in Electrical & Electronics/ Electrical / Electronics & Communication / Instrumentation Engineering Desirable : M.Tech/ME/ PhD in above disciplines	Essential Up to 4 years experience in one of the following - a) Flight Mechanics b) Control System

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16	7.2.1	PE-2	01	Essential Bachelor's degree in Mechanical / Electrical & Electronics / Electrical / Aeronautical Engineering Desirable : ME/M Tech or equivalent in Aeronautical / Aerospace Engg	Essential Minimum 4 years experience in Flight Mechanics / Flight Control Desirable: Experience in aircraft industry
17	9.1.1	PE-1	02	Essential Bachelor's degree in Electrical & Electronics / Electrical / Electronics & Communication / Instrumentation / Computer Science Engineering Desirable: ME/M.Tech or equivalent in above disciplines	Essential Up to 4 yrs Experience in - a) Programming in C/C++, Ada Test and Evaluation of Embedded systems. b) Usage of test tools like LDRA. RTRT etc. c) ASIC, FPGA & CPLD
18	10.1.1	PE-1	01	Essential Bachelor's degree in Electrical & Electronics / Electrical / Electronics & Communication Engineering	Essential Up to 4 yrs experience in- Avionics Hardware LRU Design, Development and testing. Desirable: Avionics Integration testing
19	10.2.1	PE-2	01	Essential Bachelor's degree in Computer Science Engineering	Essential Minimum 4 yrs experience in- Avionics Software Design, Development and Testing Desirable: Exp in Tools like rational suits, LDRA.
20	10.2.2	PE-2	01	Essential Bachelor's degree in Aeronautical / Mechanical Engineering Desirable : ME/ M. Tech or equivalent in above disciplines	Essential Minimum 4 years experience in - Aeronautics and Aircraft Systems. Desirable: a) Multi-disciplinary design and optimization; b) Principles of System Engineering
21	11.1.1	PE-1	01	Essential Bachelor's degree in Mechanical Engineering	Essential Up to 4 yrs experience in- a) PLM/PDM Environment with Catia V5/Enovia VPM/Team Center. b) Structural feasibility studies, Detail Design of Aircraft Structural components and technical coordination with associated group/ organization. Desirable: Experience in Aerospace

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					industry
22	11.1.2	PE-1	01	Essential Bachelor's degree in Mechanical Engineering	Essential Up to 4 yrs experience in – a) Mechanical Design of Landing Gear and Brake Management System (BMS); b) Analysis of Landing Gear Kinematics, Computation of Brake Energy, assessment of adequacy of Brake System. Desirable: Experience in Aerospace industry
23	11.2.2	PE-2	01	Essential Bachelor's degree in Mechanical Engineering Desirable : ME/ M. Tech/Ph.d or equivalent in Mechanical Engineering	Essential Minimum 4 years experience in - a) Design with specialization in Aircraft Fuel System and installation b) Analysis of flight test data, trouble shooting and evaluation of system.
24	11.3.1	PE-3	01	Essential Bachelor's degree in Mechanical Engineering Desirable: ME/M.Tech or equivalent in Mechanical Engineering	Essential Minimum 08 years experience in-design, evaluation of configuration for fighter aircraft, creation of NMG, Generation of 3-view & inboards, external stores management, estimation of mass and CG and station wise mass distribution.
25	11.3.2	PE-3	01	Essential Bachelor's degree in Mechanical Engineering	Essential Minimum 8 Yrs Experience in - a) Estimation of mass, CG and inertia for aircraft in different configuration b) Study of movement of CG during various phases of flight. c) Finalization of inboard layout considering 3D models d) Carrying out clash analysis with respect to inboards in achieving good maintainability e) Estimation of Station-wise mass distribution f) Analysis of mass properties in flight Desirable a) Exp in Aircraft industry in design or manufacturing areas b) Exp in Airworthiness requirements / system and procedures

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26	12.1.1	PE-1	02	Essential Bachelor's degree in Mechanical / Industrial / Production Engineering	Essential Up to 4 years experience in - the area of Methods / Production / Project Planning in aircraft/mechanical industries. Desirable a) Exp in CAD/CAM software and Project Management software. b) Exp in aircraft and mechanical industries
27	12.2.1	PE-2	01	Essential Bachelor's degree in Engineering in Mechanical / Industrial / Production Engineering	Essential Minimum 4 years experience in- Methods Engineering activities involving process planning, production control, scheduling, manufacturing and assembly of aircraft or similar industries.
28	12.3.1	PE-3	01	Essential Bachelor's degree in Mechanical Engineering	Essential Minimum 8 Yrs Experience in – a) Design, development of combat aircraft landing gear, nose wheel steering and arrestor hook system; b) Qualification and certification of landing gear system c) Analysis of performance of landing gear system, brake system and nose wheel steering system. d) Concept design, detail design, preparation of test schedule etc. e) Evaluation of flight test data and incorporation in design improvements / modifications.
29	13.1.1	PE-1	01	Essential Bachelor's degree in Electronics & Communication / Instrumentation Engineering	Essential Up to 4 years experience in – Telemetry systems and data acquisition systems Desirable: Experience in Aerospace Industry.
30	14.1.1	PE-1	01	Essential Bachelor's degree in Aeronautical / Aerospace / Mechanical / Electrical / Electrical & Electronics / Electronics & Communication / Instrumentation Engineering	Essential Up to 4 years experience in- a) Aviation maintenance and product support activities. Tools and testers, ground support equipment, ground handling equipment trolleys, maintenance training / simulator etc. b) Operation and maintenance related

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					<p>aspects of any of the following Aircraft: (i) Mirage-2000 (ii) Jaguar (iii) SU-30 or equivalent (iv) Civil / Transport Aircraft or Equivalent in Naval Aviation. c) Training Teaching and education in Aerospace /Squadron.</p> <p>Desirable: CATIA or any other CAD packages and 3D modeling.</p>
31	16.2.1	PE-2	01	<p>Essential Bachelor's degree in Mechanical / Production / Industrial Production Engineering</p>	<p>Essential Minimum 4yrs experience in –</p> <p>Design of Jigs and fixtures, tolerance stack up analysis, process planning components and assembly level, design for manufacture & assembly (DFMA) concepts & practices, Advanced Inspection techniques.</p> <p>Desirable: Aircraft assembly jigs, stage-wise assembly jigs, CAD</p>
32	16.2.2	PE-2	01	<p>Essential Bachelor's degree in Computer Science Engg/ Information Technology Engineering</p>	<p>Essential</p> <p>a) Product Data Management / Product Life cycle Management (PDM / PLM) implementation and customization, Maintenance of large PLM custom codes. b) Experience in usage of C/ C++ & Java Programming , RDBMS (Oracle/ DB2, etc), web application technologies including HTML, JSP, XML</p> <p>Desirable:</p> <p>a) PLM implementation projects for International Aerospace / Automobile OEMS b) Customization of ENOVIA / Team center/ CATIA V5</p>
33	16.3.1	PE-3	01	<p>Essential Bachelor's degree in Mechanical / Production / Electronics & Communication / Electrical / Electrical & Electronics / Instrumentation Engineering</p> <p>Desirable : M Tech / ME or equivalent in above disciplines</p>	<p>Essential Minimum 8yrs experience in one or more of the following areas -</p> <p>a) System installation on aircraft covering – LRUs, pipelines, electrical looms, engines, control surfaces, structural panels and associated checks. b) Cockpit equipping covering all systems, seat installation and precautions c) Fuel tank sealing and associated leak checks, use of aircraft sealants in the process d) Periodical servicing of the aircraft as</p>

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					per laid down guidelines e) Testing, maintenance and trouble shooting of aircraft systems f) Daily inspection procedures and preparation of aircraft for flight and other associated trials
34	17.1.1	PE-1	01	Essential Bachelor's degree in Electrical / Electrical & Electronics / Electronics & Communication Engineering Desirable: ME/ M.Tech or equivalent in above disciplines	Essential Up to 4 yrs Experience in Reliability Analysis, Failure Mode, Effect Analysis, conversant to use various standards MIL, JSS, DEF, RTCA, latest trend /tools/ technique of Quality Control & Assurance. Desirable: Experience in aircraft system
35	17.1.2	PE-1	01	Essential Bachelor's degree in Mechanical / Aeronautical Engineering Desirable: ME/M.Tech or equivalent in above disciplines	Essential Up to 4 Yrs Experience in Reliability Analysis, Failure Mode, Effect Analysis, conversant to use various standards MIL, JSS, DEF, RTCA, and latest trend / tools/technique of Quality Control & Assurance. Desirable: Experience in aircraft system

Note :

- i) **Candidates are advised to read the terms and conditions before applying on line**
- ii) **For post in sl.no.33, applications from Retired Short Service Commissioned Officers from Indian Air Force are desirable.**

Terms and conditions

1. The appointment will be made on Contract basis initially for a tenure of three (3) years. The initial tenure of 3 years may be curtailed or extended up to two more years based on need at ADA and performance of the individual. Individuals working on contract basis have no right to claim for permanent absorption.
2. Maximum age should not exceed 65 years on the closing date of online registration.
3. Obtaining First Class in Bachelor's degree in Engineering is mandatory. No rounding off of marks is permitted. Candidates should be in possession of first class degree certificate awarded by the University at the time of submitting the application. Provisional Degree certificate will be accepted only from the candidates who have passed in the last year.
4. Project Engineers are **not** entitled for any other allowances/financial benefits such as Provident Fund, HRA, medical reimbursement, transport, telephone, LTC, CEAS etc .as applicable to regular employees of ADA. However, TA/DA for official travel on ADA's requirement will be borne by ADA.

5. The period of training / apprenticeship will not be counted as work experience. Maximum weightage up to 2 years only will be given for the work experience as Research Fellow / Research Associate / Project Assistant etc.
6. The applications will be screened by a Committee based on the requirements and educational qualifications, experience at suitable level, professional achievements, aptitude for design, development, management skills & personal qualities and strengths. The candidates should therefore mention all qualifications/ experience/ achievements/ specialization in relevant field including those over and above the minimum qualifications.
7. The short listed candidates will be advised to appear for an interview to be conducted as per rules of ADA, at the venue and date which will be intimated in the call letter. After the interview the candidates will be offered appointment on merit basis restricted to the number of vacancies required to be filled by ADA.
8. **Candidates working in Government / Public Sector Undertakings, Autonomous organizations/ Armed forces, including departmental candidates must apply through proper channel. Candidates falling in this category, whose applications have not been received through proper channel within 20 days of the closing date of online registration will not be considered / short listed for the interview.**
9. The appointment will be subject to the completion of formalities like medical examination prescribed for group 'A' technical posts of government of India with field service liability and character verification etc.
10. The candidates should fulfill the requisite qualification and experience as on the closing date of the online registration. Educational qualifications and experience are two separate items of requirements. **The prescribed experience should have been obtained after acquiring the prescribed educational qualifications.**
11. ADA reserves the right to relax the qualification and experience.
12. Only Indian nationals need to apply.
13. Outstation candidates called for interview are eligible for reimbursement of second sleeper class to and fro train fare by shortest route from their normal place of residence or from the place of undertaking the journey, whichever is nearer to place of interview, on producing documentary proof (tickets/Boarding pass)
14. If any information furnished by the candidate online is found to be wrong during verification, the candidates will not be interviewed and TA will not be paid.
15. Selected candidates may be posted anywhere India if considered necessary.
16. Candidates applying for more than one post should submit separate online application form.
17. Interview call letters for short listed candidates will be forwarded by E-mail & Post only. Hence candidates may correctly fill the E-mail id, Postal Address & Mobile Number. No queries in this regard will be entertained on telephone.

18. Genuine queries if any, regarding the advertisement may be sent to the email address: **admin-hr@jetmail.ada.gov.in**

How to Apply:

a) Candidates are requested to apply only on-line against this advertisement through ADA website: <http://www.ada.gov.in/recruit>. **Registration on ADA website will be kept open from 01 Aug 2013 to 31 Aug 2013.**

b) The candidates must submit the online application well in advance without waiting for the closing date. Print out of the application will be required to be submitted at the time of interview.

c) The candidates are required to upload the following documents compulsorily.

- (i) Scanned photo of size 110Wx140H px(Image JPG).
(file size should not exceed 30KB).
- (ii) Scanned legible copies of Degree Certificate and Experience Certificates in a single PDF file and the file size should not exceed **1 MB**.
(No marks sheet to be uploaded)

d) Application received through any other mode would not be accepted and will be summarily rejected.

e) Candidates are **not required** to submit the print out of application by post. However, candidates working in Government / Public Sector Undertakings, Autonomous organizations/ Armed forces, including departmental candidates must apply through proper channel as mentioned in para 8 of the terms and conditions.