# **ENSTROM**HELICOPTER CORPORATION

## JOB DESCRIPTION

Position: Test Engineer

Reports To: Experimental Manager

Status: Exempt

#### **POSITION RESPONSIBILITIES**

This individual will work in the Experimental Engineering department and will be responsible for conducting R&D and certification ground/flight tests. The candidate will be responsible for test preparation, planning instrumentation and strain gauges, instrumentation and equipment calibration, programming data acquisition software, data reduction, and test reporting. He/she will assist in test conformities and TIA preparation, participate in FAA certification projects, support safety of flight briefings, and assist other Engineering Groups on an "as needed/as available" basis depending upon his/her other skills and abilities. If this individual possesses an FAA pilot's license, this position may also have some Test Pilot duties depending upon his/her license, ratings, and experience.

Duties include but are not limited to the following:

## Test Engineer:

This individual will be responsible for R&D and certification ground/flight tests, including:

- Reviewing proposed projects and developing compliance and test matrices
- Planning, writing, and/or reviewing test plans and reports
- Programming data acquisition software
- Data reduction
- Planning instrumentation and strain gauges
- Instrumentation and equipment calibration
- · Designing test facilities and/or acting as a liaison to outside sources providing test facilities
- Conducting weight and balance and maintaining records
- · Conducting ground/flight tests, including pilot coordination and pre/post flight briefings as required
- Coordination and preparation of test conformities and TIA activities
- Coordinating test activities with certification agencies (FAA, etc.)
- Preparing Type Inspection Reports

## Flight Test Pilot:

Depending upon the individual's qualifications, responsibilities may include some Test Pilot duties, including:

- Aircraft tracking and maintenance check flights
- Instrumentation checks
- Company R&D test flights
- TIA/certification test flights
- Reviewing Rotorcraft Flight Manuals

## REQUIRED KNOWLEDGE, SKILLS AND ABILITIES

- Minimum of a Bachelor's of Science degree in Aerospace Engineering, or related field.
- Advanced understanding of aircraft structure and systems, rotorcraft dynamics, aerodynamics, and powerplant.
- An understanding of FAA rules, regulations, and certification processes.
- An understanding of and ability to write test practices and procedures.
- Experience with strain gauges, instrumentation, and wiring.
- Advanced understanding of data acquisition software (LabView preferred).
- Advanced computer skills (MS Word, Excel, PowerPoint, Project).
- Superior problem solving skills.
- Superior communication skills (verbal and written).
- An ability to work multiple projects and multi-task.
- Proven organizational skills.
- An ability to work with and mentor people.

## The following are desirable, but not required:

- FAA A&P License
- FAA Pilot License
- FAA Designated Engineering Representative (DER), Flight Analyst and/or Flight Test Pilot
- Basic design skills (SolidWorks, CADKey)