

Security Clearances Impact Salaries of Engineers & Engineering Managers

by EngineerSalary.com Staff | May 23, 2008

A Secret or Top Secret clearance can add a significant increase to an engineer's salary, when compared with their counterparts working in the commercial sector.

With spending increases for defense since 2000, the demand by companies for qualified engineers, scientists and technical managers who are "*clearance eligible*" is strong — and is expanding annually. Security clearance for employees is required by most companies working on government contracts, including military and homeland security — and on CIA or NSA software and hardware intelligence initiatives (such as SIGINT, COMINT, ELINT, C4ISR, cryptanalysis, information assurance, signals intelligence, database software and remote imaging).

Additionally, firms that have employees working with the Department of Energy, and many other federal departments, normally require that authority's clearance for sensitive projects.

New requests for clearance investigations have inundated the federal government's **Defense Security Service** staff, resulting in a greater than 415,000-person backlog waiting for their clearance to be processed and granted.

Depending on the clearance level (Secret, Top Secret, above Top Secret), investigations range from a verification of professional, personal, financial and educational references with a criminal background check for Secret... to a lengthy and in-depth lifestyle investigation, including [polygraph testing](#) for Top Secret.

The candidate under consideration must be a U.S. citizen. The DSS evaluates a candidate's loyalty, character, trustworthiness and reliability, based on personal field interviews with references, and other sources (including state and local criminal records).

There are about 4.4 million cleared U.S. citizens: 1.2 million civilians working for private industry and the federal government, and over three million military personnel (all branches).

DSS investigates and clears industry personnel under the direction of the [National Industrial Security Program](#) — for the Department of Defense and 21 other government agencies. The NISP was established to ensure that industry (and universities), while working on government contracts or conducting research, diligently protect classified material in their possession. DSS has oversight for nearly 11,000 cleared facilities.

CLEARANCE ELIGIBILITY GUIDELINES TIGHTENED

In a December, 2005 revision of the ***Adjudicative Guidelines for Determining Eligibility for Access to Classified Information***, it was modified from the 1997 version to reflect a shift in policy for granting security clearances. In another 2005 White House memo, guidelines were also changed for individuals with an existing clearance. Both documents are available for download in pdf format: [Adjudicative Security Clearance Guidelines](#) and [Existing Security Clearance Policy](#).

Additional documents [Suitability Factors for Obtaining a Security Clearance](#) (June, 2007), [DOD Management Report 06-02](#) (March, 2006), [DOD Security Clearance Process](#) (April, 2006) can also be downloaded.

WHERE WILL SALARIES GO FOR CLEARED ENGINEERS

For 2007 EngineerSalary shows an up tick of 12.6% for a cleared engineer on the East Coast (using 10 years of design experience, B.S. engineering degree and Secret clearance) compared to their counterparts working in the commercial sector. Add Top Secret or higher and this differential jumps to over 14.8% on average (all engineering disciplines surveyed). The West Coast lags slightly behind at 11.7% and 13.4%. 2008 is projected to follow current data.

The highest paid cleared engineers and managers are located in Washington, DC, followed by Virginia and Maryland.

Massachusetts, Colorado, New Jersey, Texas, California and New York scored in the top 10, due to a concentration of defense sector companies in those states. In DC and Virginia salaries were, in some cases, over 21% higher than for the same position and level of responsibility in a non-cleared environment.

The current demand in the defense sector is high for experienced software, electrical and RF engineers and technical managers. Many of these in-demand professionals have used their technical skills and clearance to leverage higher income when moving to a new company, or negotiating increased compensation with their current employer.

Engineers and technical managers with a Secret or Top Secret clearance earn more money than their non-cleared colleagues in other states.

Non-technical employees (finance, sales, administration, clerical, manufacturing) with a Secret clearance can expect to be paid slightly above prevailing local compensation (typically 2-5%), but the differential for engineers and engineering managers is the most significant of any profession, due to increasing scarcity of qualified candidates. The demand is currently well ahead of supply.

The quantity of engineers graduating from American colleges and universities that are U.S. citizens who are "clearance eligible" is decreasing, which shrinks the overall pool.

Defense companies nationwide will continue to aggressively compete for U.S. citizens with an engineering degree. Don't expect offers to go off the scale, but these numbers are destined to crawl slightly higher every year (>0.57%/yr increase from 1997-2007).

The market and urgency sets the value, using supply and demand principles.

EngineerSalary estimates (using the current salary data adjusted for inflation) a differential *average* of 14% or higher will exist until 2012 (using compensation data from all states except AK and HI to determine % of average). This number would move downward only if defense spending decreases significantly under a new administration.

Engineers can't apply for a security clearance as a way to enhance their marketability. Instead, they must be hired by a company with a government contract — for a position that requires specific access to classified material to do their job — before the DSS will begin the time consuming and expensive clearance process (initiated by the company's security officer). As a result, the market for engineers with an active clearance is so tight that they can see a hefty bump in salary when moving to a new employer. For Top Secret, TS/SCI, TS SI/TK, TS/EBI (and other TS clearances) these numbers move even higher.

Security clearances have become a negotiable cash commodity, helping astute engineers and managers leverage higher salaries.

The process for cashing in on a clearance normally requires accepting an offer from a new employer and changing jobs.

In a recent survey, it was found that long time employees with various levels of clearance were not receiving compensation equal to less experienced engineers that opted to change their employer. This applied to employers hiring engineers at levels, in some cases, 15% higher than existing long time employees (with more applicable experience). It is not uncommon to see salaries increase by \$7K to as high as \$25K by moving to a new employer.

Some companies, to retain valuable human capital, have remained industry competitive. Many others haven't. This has created increased interviewing by many engineers, to evaluate what they are worth on the open market. They are taking these offers back to their employees for adjustment, and many are changing jobs more frequently to maximize their income. A defense company's profitability can be linked directly to the retention rate of their cleared employees, causing many to rethink their salary structures frequently, particularly for technical staff.

Employers lure experienced and cleared engineers away from their competitors with more interesting work, and increased responsibility — at a better salary. Many defense technology companies are offering incentives to a new hire in the form of a starting bonus (in addition to base salary), or a year end performance bonus — or both. Sign-on bonuses are ranging from \$3,000 at the low end to over \$20,000 at the high end (depending on urgency, previous experience and needed skills).

Other incentives include offering additional vacation, more personal time off, professional training (with funding for advanced degrees), along with flexible work hours. Child care is one of the most highly valued perks. A few companies even report that they are leasing cars for senior managers. Benefits packages are being individually designed, in some cases, to fit the employee's specific needs.

Some employers offer financial planners to assist the employee with tax preparation, paid for by the company. Some offer free cafeteria service. Perks aren't limited to the defense industry giants... even the smallest employers are getting more creative and aggressive in designing packages to compete for and attract the best engineers.

Relocation funded by the company is common — minus a house buy. Most employers are also providing a company-funded allowance for temporary living expenses, ranging from a couple of months to six months (in some cases even longer). Many include a house hunting trip for the spouse (*after acceptance of the offer*). In fact, some companies are now offering to fly both husband and wife in for the initial interview, so that the spouse can meet with a realtor (and survey the area) while the husband or wife interviews.

Companies are using specialized job fairs to meet experienced engineers with "a ticket".

The latest iteration is the job fair exclusively for cleared professionals, allowing the candidate to meet and evaluate many defense companies that are hiring engineers in a single day. Participating companies bring members of their engineering staff to discuss the products, technology, culture and environment. If mutual interest is established, the company schedules a site interview. Candidates and employees report great success in attending these hiring events.

This waiting period (six months or more from hire date for a new Secret, up to 18 months for a TS) has forced companies to look for other innovative ways to add cleared engineers to their workforce — by hiring individuals who already have an active (or even recently expired clearance).

Some companies are focusing their recruiting efforts on military personnel separating from the service.

For this article, six Fortune 500 defense companies were contacted by EngineerSalary, and all said that they hire very few ex-military engineers, because most were users of technology, rather than designers. This adds another layer of difficulty in finding cleared engineers to fill design and development roles.

A non-salary benefit of a clearance: the requirement locks out foreign nationals, and prevents the position from being offshored. Even dual citizenship will usually disqualify an individual from consideration, according to the DSS.

ENGINEERS IN FEDERAL GOVERNMENT SERVICE

The federal government has had difficulty, in the past, recruiting and retaining its engineering employees because its salary classification system was not competitive with the private sector.

To rectify this, the federal government established a special wage rate system for certain professional or technical occupations, including engineering. "Specialty pay," (as the system is known), intended to close the gap in salary levels between federal and private sector professionals. Doing so assists the federal government in overcoming compensation barriers to the recruitment of engineers and scientists.

The federal government has also adopted a "locality pay" system. Federal workers in high cost-of-living areas are compensated at higher rates, in order to bring employees' salaries in line with private sector salaries in the same area. For example, over the last two years federal employees living in Washington, D.C. area received locality pay increases, which totaled 5.65%.

Competition is expected for many Federal positions, especially during times of economic uncertainty, when technical professionals seek the stability of Federal employment. In 2007, the Federal Government (excluding the U.S. Postal Service) employed about 1.9 million civilian workers, making it the nation's single largest employer. Because data on employment for certain agencies is not released for national security reasons, this total does not include employment for the Central Intelligence Agency, National Security Agency, Defense Intelligence Agency, and National Imagery and Mapping Agency.

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