WINDSOR -- Aero Gear Inc., a small maker of gears for jet engines and helicopters, has won an $11 million contract from the Army to help keep older aircraft flying.

Under the three-year contract, the aerospace manufacturer will design and build replacement gearboxes and other parts for engines used by many aging military planes and helicopters.

For example, company President Douglas Rose said, some work will be done for the TF33 turbofan engine, built by Pratt & Whitney between 1959 and 1985. That engine powers older planes, including the B-52 bomber and K-135 Stratotanker.

Rose explained that military aircraft that have been in service for decades can be grounded because of a lack of spare parts. Frequently, he said, the original manufacturers no longer make such parts or have gone out of business.

Gears are used to tap the power of the jet turbine and use it to operate fuel pumps, hydraulic systems and electric generators needed to fly the plane, Rose said.

In helicopters, gears are used to translate engine power to the rotors, he said.

The contract was awarded by the Army’s Benet Laboratories near Albany.

U.S. Sen. Christopher J. Dodd, D-Conn., visited the company Thursday to announce the grant, which he helped obtain for Aero Gear.

"You can keep these planes flying a lot longer with this, and it's a real cost savings," Dodd said. "It's a terrific concept."

He said the process will benefit aircraft "worn down by combat in Iraq and Afghanistan."

Rose said the 24-year-old company, which had $18 million in sales last year, employs about 115.

He said it will add more than a dozen employees within the next few months because of the Army contract and hopes to add twice that over the three-year term of the contract.

He said the contract does not call for "reverse engineering," in which a manufacturer merely creates a replica of the original gear assembly or other system.

Instead, Aero Gear will "re-engineer" systems by incorporating newer materials and technologies to improve performance.

Allen Samuel, executive director of Aerospace Components Manufacturers, the state's cluster group of 46 small Hartford-area companies, said he hopes other companies will follow the example set by Aero Gear.

"I can clearly see this as an example that other companies will follow," he said, noting that Connecticut manufacturers are seeking ways to compete through design engineering and high-value-added processes instead of bulk production.