

# New Compressor Added to Glenn's 450- psig Combustion Air System



*Compressor C-18 with electric drive motor and auxiliary systems.*

In September 1999, the Central Process Systems Engineering Branch and the Maintenance and the Central Process Systems Operations Branch, released for service a new high-pressure compressor to supplement the 450-psig Combustion Air System at the NASA Glenn Research Center at Lewis Field. The new compressor, designated C-18, is located in Glenn's Central Air Equipment Building and is remotely operated from the Central Control Building. C-18 can provide 40 pounds per second (pps) of airflow at pressure to our research customers. This capability augments our existing system capacity (compressors C-4 at 38 pps and C-5 at 32 pps), which is generated from Glenn's Engine Research Building. The C-18 compressor was originally part of Glenn's 21-Inch Hypersonic Tunnel, which was transferred from the Jet Propulsion Laboratory to Glenn in the mid-1980's. With the investment of construction of facilities funding, the compressor was modified, new mechanical and electrical support equipment were purchased, and the unit was installed in the basement of the Central Air Equipment Building. After several weeks of checkout and troubleshooting, the new compressor was ready for long-term, reliable operations. With a total of 110 pps in airflow now available, Glenn is well positioned to support the high-pressure air test requirements of our research customers.

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