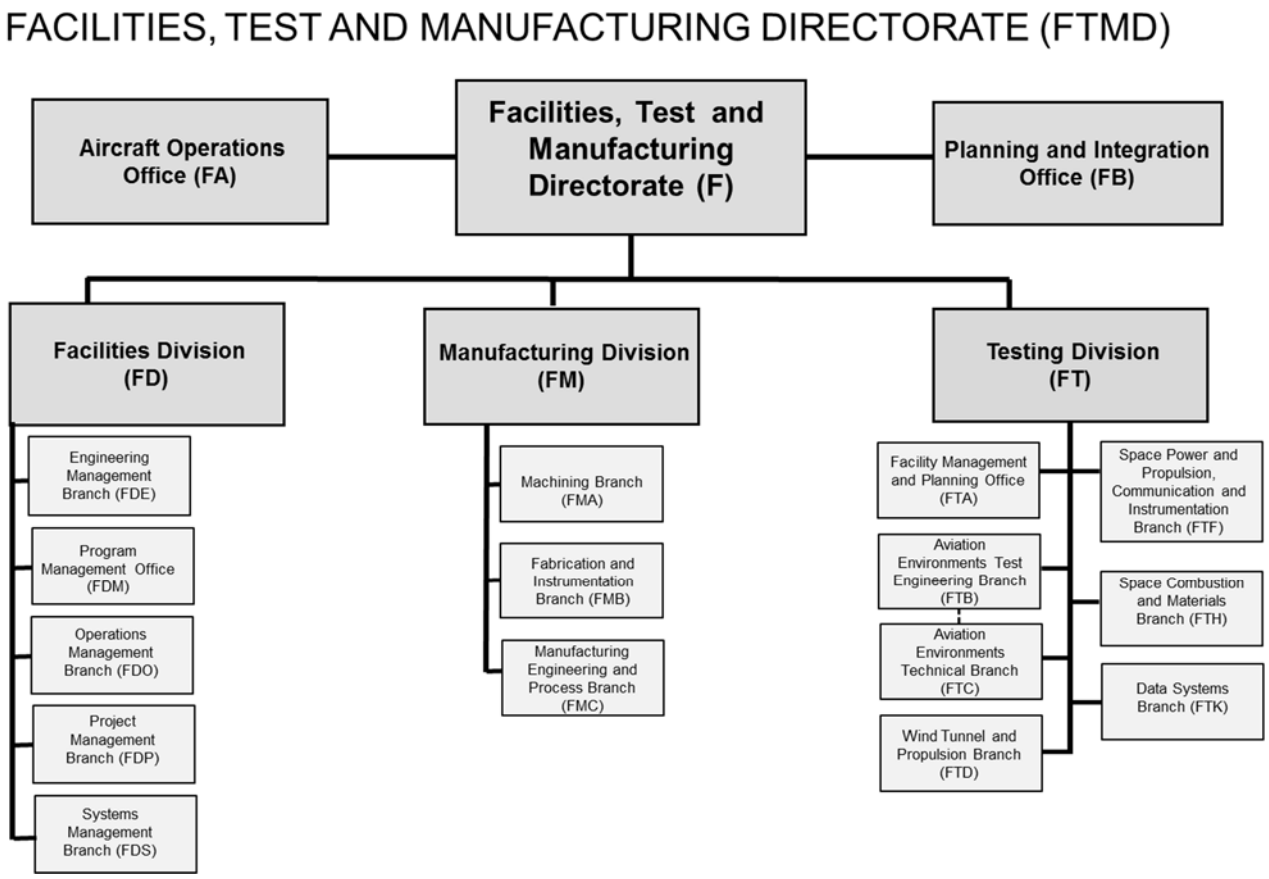
Attachment B
FTMD and PBS Organizational Details and Functions



FTMD Functional Responsibilities by Office Code

F – Facilities Test and Manufacturing Directorate - provides management of all institutional and test facilities, systems and infrastructure for NASA, the Glenn community and outside industry. Services include: engineering and design, systems operation, project management, technician support, construction management and quality assurance.

FA – Aircraft Operations Office - Flies, maintains, and modifies aircraft for scientific research and aeronautical test purposes.

FB –Planning and Integration Office - Provides and develops state-of-the-art systems, tools and processes in support of the management of the financial, human, facility, and equipment resources for the Directorate. Manages the certification of all GRC pressure systems.

FD – Facilities Division - Assures safe, efficient, reliable, and quality facilities and systems to support the Research and Development mission. Construction of Facilities ensures that the facilities critical to achieving NASA's space and aeronautics programs conform to requirements and initiatives for the

protection of the environment and human health. The Pressure Systems Office certifies pressure vessels and pressurized systems (PVS) for safe operation per agency policy and National Consensus Codes.

FDE – Engineering Management Branch - Provides facilities engineering for Central Process Systems, institutional and research facilities, and infrastructure that are safe, efficient, reliable, and environmentally responsible.

FDM – Program Management Office - Provides strategic and tactical program oversight of construction of facilities, contracts, facilities maintenance, energy efficiency and water conservation, real property, pressure vessel and systems recertification, and space management. Also provides functional liaison to NASA Headquarters Facilities Engineering and Real Property Division. It provides Building Managers to plan and coordinate facility occupants' needs with Facilities Division activities and services.

FDO – Operations Management Branch - Provides contract oversight of maintenance and operation service providers. Oversees operations and maintenance of all facilities, systems, and grounds that provide safe, efficient, reliable, cost-effective, and environmentally responsible working conditions. Provides facilities management of major systems such as electric power distribution, Central Process, and institutional systems.

FDP – Project Management Branch - Provides coordination, contract management, oversight, and quality assurance for the implementation of construction projects.

FDS – Systems Management Branch - Provides Systems Management through long term stewardship of major systems such as electric power distribution, Central Process, and institutional systems.

FE – Energy and Environmental Management Office - Provides overall coordination and integration of Glenn's energy and environmental efforts.

FM – Manufacturing Division - Operates machining, fabrication, and instrumentation facilities within Buildings 50 and 14, and is also responsible for the temporary storage facility for materials received.

FMA - Machining Branch - Specializes in making close tolerance parts and delivering quality products. Capabilities include, machine with multi-axis CNC milling and turning centers, develop tooling and fixturing, make prototypes to production pieces with tolerances to ±.0001”, and expert knowledge in all materials, including exotics and plastics.

FMB - Fabrication and Instrumentation Branch - Provides advanced fabrication and instrumentation technologies to support the development of unique aerospace research hardware and flight articles for the GRC aeronautics and space projects.

FMC - Manufacturing Engineering and Processes Branch - Provides discipline engineering for manufacturing, including consultation and design for aerospace test articles and flight hardware. The branch also performs oversight of spaceflight assembly, integration, assembly and production for recurring production items for which the Center has responsibility as well as develops manufacturing space flight processes, travelers and process plans.

FT – Testing Division - Assure safe, cost-effective, responsive and reliable performance and utilization of research laboratories and research testing to accomplish the R&D mission of the Glenn Research Center (GRC).

FTA – Facility Management and Planning Office - serves as a primary point-of-contact for the planning and scheduling of test programs and activities in the GRC test facilities. Provides the overall oversight and strategic management to ensure customers' requirements are satisfied and that the facilities are available and optimally utilized.

FTB – Aviation Environments Test Engineering Branch - provides mechanical and electrical test engineering support to the Center's aero and space programs in the Icing Research Tunnel, the Aero Acoustic Propulsion Lab, and the Engine Research Building.

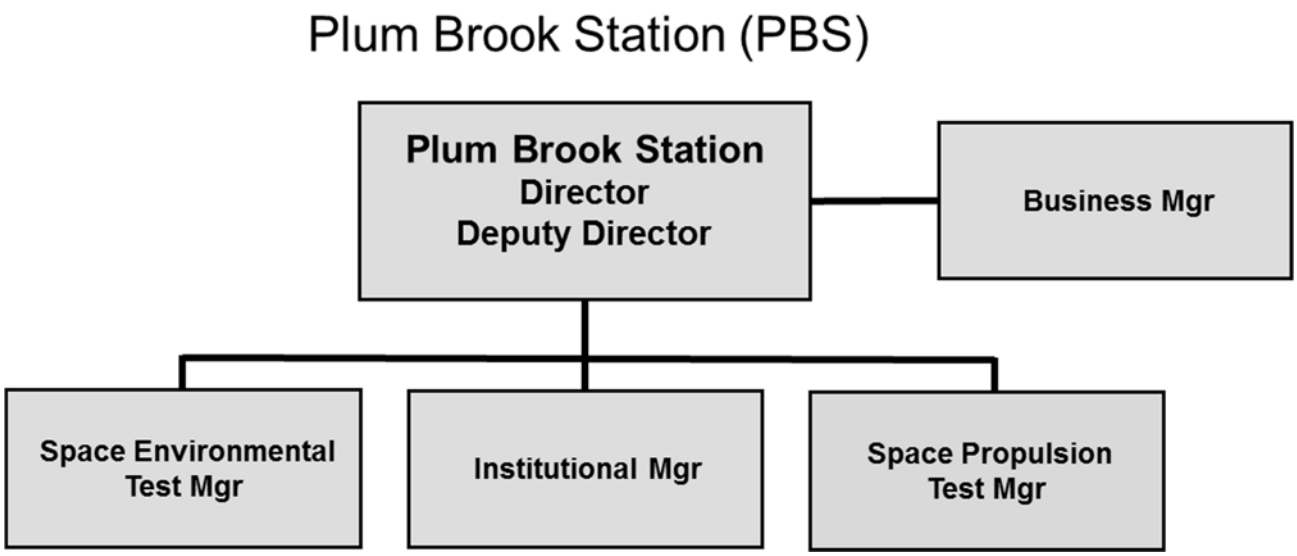
FTC – Aviation Environments Technical Branch - provides mechanical, electrical, and electronic engineering technician support to the Center's aero-propulsion projects in the Icing Research Tunnel, the Aero Acoustic Propulsion Lab, and the Engine Research Building.

FTD - Wind Tunnel and Propulsion Test Branch - provides mechanical and electrical test engineering support and mechanical, electrical and electronic engineering technician support to the Center's aerospace projects in the 10x10 Supersonic Wind Tunnel, the 8x6/9x15 Wind Tunnel Complex, the Propulsion Systems Laboratory, and the Engine Component Research Lab.

FTF - Space Power and Propulsion, Communications & Instrumentation Branch - provides mechanical and electrical test engineering support and mechanical, electrical, and electronic engineering technician support to the Center's space projects in the Space Simulation Test Facilities, the Power Systems Facility and the Communications and Instrumentation Labs at the Center.

FTH - Space Combustion and Materials Branch - provides mechanical and electrical test engineering support and mechanical, electrical and electronic engineering technician support to the Center's space projects in the Microgravity, Cryogenic, and Space Combustion Test Facilities in addition to the Materials and Structures Labs at the Center.

FTK - Data Systems Branch - provides engineering data acquisition systems and applications support for NASA GRC's experimental test facilities. The following services are provided: creation of real-time data acquisition, reduction, data management and post processing software; design, installation and maintenance of hardware equipment for data collection; and the management of the Data Systems Development Test-bed.



PBS Functional Responsibilities

Plum Brook Station Director/Deputy Director - responsible for the management, test engineering, technical support, and test operations and maintenance at PBS. In addition PBS has management responsibility for the institutional operations, and institutional maintenance and repair at PBS.

Business Manager – Manages the accounting of all funds provided to PBS for the execution of maintenance and upgrade of the institutional infrastructure; maintenance and upgrade of the test facility infrastructure; planning, development, and execution of test programs; and agricultural, on-site office space, and other government-owned assets. Develops, analyzes, and formulates the PBS budgets including managing the in-house process for collecting budget preparation input; reviewing and preparing budget estimates; and preparing the budget presentations for all sources of income to PBS. Provides managerial and financial reporting of the PBS resources (both financial and personnel) in various formats to enable strategic short and long-range decisions to be made by PBS and senior NASA GRC management. Monitors the Plum Brook contract expenditures and advises NASA Managers when additional funding will be required, expedites the obligating process on Contracts in order to meet deadlines without interruption, coordinates the plans for funding specific tasks/work efforts, and monitors Contractor performance against budgets.

Institutional Manager – Responsible for the overall management of PBS institutional systems. Develops plans and budgets to support current and future station requirements. Advocates for required resources and manages approved resources. Develops and implements policies, guidelines, procedures, and schedules and serves as a technical specialist, expert consultant, and point of contact for PBS institutional systems. Manages PBS institutional services. Responsible for identifying and addressing internal and external customer requirements. Establishes schedules and priorities for institutional services. Responsible for the overall development and delivery/execution of institutional service estimates, proposals, plans, procedures, operations, and problem resolution required to ensure successful station operations.

Space Environmental Test Manager – Responsible for the overall management of space environment test facilities at PBS (primarily the Space Power Facility). Develops plans and budgets to support current and future testing requirements. Advocates for required resources and manages approved resources. Develops and implements facility policies, guidelines, procedures, and schedules and serves as a technical specialist, expert consultant, and point of contact for assigned facilities. Manages space environment simulation testing in assigned facilities. Responsible for identifying and engaging potential test customers. Establishes schedules and priorities for the use of the facilities. Responsible for the overall development and delivery/execution of test estimates, proposals, plans, procedures, operations, and problem resolution required to ensure successful test operations.

Space Propulsion Test Manager – Responsible for the overall management of space propulsion test facilities at PBS, including B-2, HTF and CCL. Develops plans and budgets to support current and future testing requirements. Advocates for required resources and manages approved resources. Develops and implements facility policies, guidelines, procedures, and schedules and serves as a technical specialist, expert consultant, and point of contact for assigned facilities. Manages space propulsion testing in assigned facilities. Responsible for identifying and engaging potential test customers. Establishes schedules and priorities for the use of the facilities. Responsible for the overall development and delivery/execution of test estimates, proposals, plans, procedures, operations, and problem resolution required to ensure successful test operations.