Mr. Dry was born Charles Hobson Dry on October 27, 1938 in Ardmore, Oklahoma, and grew up in Tishomingo, Oklahoma. He attended Murray State College, East Central University and the University of Oklahoma with continuing his education at UCLA and University of Houston. After graduating from college with a Bachelor of Science degree in Mathematics and Physics, he voluntarily joined the Oklahoma National Guard 45th Infantry and received an Honorable Discharge in 1967.

Mr. Dry's aviation and space career began with an assignment at the highly classified China Lake Naval Ordnance Test Range (NOTS), China Lake, California, where he was responsible for weapon launch, trajectory, performance, navigation/guidance and overall weapon operational effectiveness. He designed test concepts and special flight numerical analysis, developed mathematical and statistical models representing errors in the advanced weapons systems. He received training in range and flight operations, target acquisition systems, communications, radar and telemetry systems. Mr. Dry also learned flight instrumentation that was used on events such as jet patterns, weapons launchings, warhead behavior and static firings. Considerable time was spent with actual flight crews and test personnel developing aircraft and surface launch procedures and operations.

Weapon systems development was one of the primary roles of NOTS and extended from air-to-air missiles, air-to-surface weapon systems and surface-launched missiles. The tactical aircraft weapon systems integration at NOTS involved Navy, Marine and Air Force aircraft including the F/A-18, AV-8B, A-7E, A-6B, A-4M and the Bell AH-1JIT. The DeHaviliand aircraft was used for parachute drops and general support missions. NOTS also operated two supersonic test tracks, the 4.1-mile Naval Research Track and the 3,000-foot Terminal and Exterior Ballistics Track.

Mr. Dry's aspiration to enter the space program led him to accept a position as Flight Test Engineer on the Acceleration Test Sled at NOTS. With this position came an array of testing including manned and unmanned G-Force evaluation tests while wearing and providing analysis of various types of G Suits. During testing, test instrumentation for high-speed performance of G-Force profiles were sequenced at different test speeds. The experience gained from these tests proved to be valuable later in his career at NASA.

Mr. Dry's eagerness to become completely involved in aviation and the space program led him to accept a position as Senior Research Engineer for North American Aviation in Tulsa, Oklahoma. His first assignment as Research Engineer came with the responsibility of analyzing guidance position data to determine the accuracy of the B-52 aircraft and the WS-131 B nuclear warhead missiles inertial guidance system. B-52 flight trajectories were evaluated to assess the operation, maintainability, reliability and overall performance of the missile. During flight missions, he prepared on-board error analysis reports for each mission flown, including reports on problem areas that encompassed the weapon system, assembly or component levels, error contributions of the B-52 from those of its missile guidance system and performance during free-flight such as range, velocity and altitude. Mr. Dry worked closely with the B-52 flight crews in areas of guidance, armament, electrical, flight control and instrumentation. The analysis provided was formulated based on telemetry data, final space position data on board B-52 plotting maps and flight crew debriefings. Mr. Dry also served as liaison between North American and the United States Air Force.

While at North American, a unique challenge arose, and Mr. Dry was offered the opportunity to become part of NASA's space program. The challenge: How to transport the Apollo Lunar Module Adapter (SLA) from the manufacturer's site in Tulsa, Oklahoma to the launch pad in Florida for final assembly. The original plan was to utilize the modified version of the Boeing C-97 Stratocruiser called the Super Guppy; however, due to dimensional constraints of the Super Guppy, the Army Vertal CH-47 A helicopter was substituted. As you would expect, Mr. Dry eagerly accepted this challenge and was named Test Engineer for the Apollo Spacecraft Lunar Module Adapter Flight Evaluation Test Program. Initially, test flights were flown from Oklahoma to Florida to determine that the CH-47 A helicopter was suitable for transporting the SLA over long distances. Mr. Dry was responsible for engineering and flight crew reports that demonstrated the ability of the CH-47 A to lift, transport and land the SLA. He skillfully led his team as they wrote flight crew mission test plans, schedules, designs and operation procedures. In effect, he was responsible for the complete and final flight documentation and served as the Army/NASA liaison. The test program proved highly successful, and with confidence, helicopter flight crews began transporting the SLA to the launch pad. Considering the success of his previous experiences in aviation and space-related activities and with a pioneering spirit for space exploration, it is no coincidence that Mr. Dry was finally presented with the opportunity to work for the NASA's Johnson Space Center in Houston, Texas. His dream was realized in 1966 when he accepted a position as Senior Scientific Analyst, responsible for providing engineering direction and coordination for NASA laboratory tests during space flight post-test evaluation. He helped develop detailed mathematic models and techniques used in data analysis of flight tests. He worked to prepare quality control reviews of the data to ensure that the results were complete and accurate for publication and reference for future space flights.

Mr. Dry's next assignment at NASA was to work on the design, development and supervision of the installation and in-flight monitoring and operations systems of the onboard Integrated Scientific Experimental Instrumentation Package for the Air Force/NASA WB-57 A Earth Resources High-Altitude Reconnaissance Aircraft program. As the In-flight Scientific Operator, he was responsible for performance, stability, control and flight dynamic analysis of the instrumentation package. He worked on the design and development of the state-of-the-art instrumentation pallet that included development of infrared sensors and optics, photographic equipment and sophisticated computer systems. He assisted other engineers in developing the mathematical models used in the analysis of surveillance data that resulted from these high-altitude missions, most of which were flown at altitudes of 50,000 to 60,000 feet. Results were presented to the Air Force and NASA personnel. The achievements of these flights are today still being studied. The data from these flights are not only used for NASA earth studies but are also used by several other state and federal agencies.

Mr. Dry then progressed from Senior Scientific Analyst to the position of Senior Systems Engineer, responsible for the supervision of a team of engineers and technicians participating in the critical task of designing, develop and testing the ablative re-entry spacecraft thermal protection material (heat shield) of the Apollo Command Module. The design and development of the heat shield material encompassed two primary objectives:

1. The development of a material able to cope with unique temperatures of 150 degrees below zero to temperatures 5000 degrees above zero while taking into account stringent weight restrictions;
2. The development of innovative techniques for the application of the material.

Engineering tests were conducted using electric arc-jet devices ranging from 30 kilowatts to up to 10 megawatts that simulated the complete profile of re-entry from the lunar missions. Mr. Dry and his team engineered and developed ultrasonic testing techniques for evaluating the bonding of Apollo material to the spacecraft. He also served on the team responsible for the design of a special dielectric probe used to sense moisture in the material. For his accomplishments and unwavering dedication to the studies, Mr. Dry received the covetous NASA Achievement Award.

NASA-JSC is responsible for design, development and testing of manned flight hardware, for the selection of spacecraft crews, ground control of manned flights and many of the experiments performed aboard the flights. To safely accomplish these missions and to properly prepare the astronauts, NASA developed the Astronaut Test Crewman Program (Test Astronauts). Mr. Dry knew of a few scientists and engineers who had been selected for the Test Astronaut team and decided that this was going to be his next contribution to NASA's space program and his country. The selection process was strenuous, and he was ultimately chosen to serve NASA as a Test Astronaut. Mr. Dry underwent a rigorous physical and mental training period that was necessary to bring him to the full competence level required for space flight testing. Astronaut training and testing involves more than just suiting up for the mission. It involves realistic simulation of travel through space, descent to the moon and return to earth. Mr. Dry knew there would be many trials and triumphs and deadly serious "what if games" and that each test had contingencies. He knew to be prepared and that a malfunction or an unexpected occurrence would be part of life. The one constant in the early testing days was the "element of the unexpected." These high stakes made Mr. Dry more determined than ever to succeed and serve. He knew that testing and training were the name of the game. Each new test mission produced more questions than answers but that was exactly the challenge he had prepared for. He was committed and proud to be part of a team that was on their way to the moon. To prepare the Astronauts for their space missions, NASA scientists and engineers invented an extraordinary array of training procedures and testing equipment. The Lunar environment is hostile to man – it is hot and cold with no atmosphere. How could man survive, much less operate in such an unfriendly environment was NASA's ultimate challenge. Most of the testing was designed to simply keep the Astronauts alive beyond earth's atmosphere. Mr. Dry's job was to wear, test, evaluate and report on each spacesuit and each piece of flight hardware. This initial alpha testing was necessary and extremely important if the flight crews were to be able to perform their tasks with competence.

The Apollo Astronauts could stay on the lunar surface for only a few days. Scientists needed continued observations of lunar activity. The solution came with the development of Apollo Lunar Surface Experiments Package (ALSEP). As a Test Astronaut, Mr. Dry engineered, tested and provided recommendations towards the development of the ALSEP which consisted of Heat Flow experiments, Lunar Ejecta and Meteorites experiments, Lunar Seismic Profiling experiments, Lunar Astrospheric Composition experiments and experiments with the Lunar Surface Greivmeter. Mr. Dry tested and assessed each of these experiments from NASA's Lunar Topographical Simulator site while wearing a complete Apollo (A-5L) space suit. Apollo flight crew standardization and deployment procedures for each of the five Lunar Landing ALSEP experiments were well documented, and to this day, ALSEP remains on the lunar surface.

Astronaut testing was hard, and some tests took the crewman to total exhaustion. The following are examples of some of the countless hours of bone-cracking testing and training that Mr. Dry endured:

- Centrifuge G-Force testing and training in the NASA-JSC Flight Acceleration Facility - Spacecraft, lift-off and reentry profiles were conducted at various G-Force accelerations.

- Command Modular Landing Impact Testing - Manned impact testing vehicle used to develop couch molds to fit astronaut size and shape for maximum flight support. Command Modular was dropped from high test towers for shock and impact.
- Suit testing was performed in several different-sized vacuum chambers (including anechoic) - These tests were manned to simulate the hostile space environment.
- Water training in the Gulf of Mexico conducted using the NASA Motor Vessel Retriever - Spacecraft attached to the MVR was utilized to simulate lost spacecraft, pre-egress activities, egress, life-raft utilization, survival training, communications and helicopter recovery.
- Served on simulator crews during actual flight missions.
- Received basic training in spacecraft flight simulation, environmental and contingency systems, thermal protection, spacecraft design and development.
- Development and testing of the Lunar Tools used to collect lunar samples. The tools were designed to scoop for loose material and pick up moon rocks. NASA developed these tools because it was thought that the space suits might make it impossible for Astronauts to bend over far enough to retrieve objects from the moon's surface, etc.
- Worked on several different configurations of 1/6th Gravity Simulators that prepared Astronauts for Lunar Traversing. One type simulator was a truck-borne hoist adjusted for 1/6th gravity and was used to train for lunar loping and kangaroo hopping gaits, which proved to be invaluable techniques for lunar mobility. Additionally, testing using ingenious slings supported by the centrifuge gondola arm were used to walk/run laps around the centrifuge wall.
- Due to spacesuit limitations and distance capabilities from the Lunar Modular, NASA designed and developed the Lunar Rover, which was used to carry tools and equipment and collect samples. Testing of the Lunar Rover was performed at NASA's Lunar Topographical Simulation Facility.
- Worked on the Lunar Surface probes that were used by Neil Armstrong and Buzz Aldrin to penetrate the surface of the moon. These probes were designed to collect core samples of the sub-surface material of the moon. This experiment was very successful, and Mr. Dry received the Apollo Achievement Award.
- Worked on the flight hardware integrated tests designed to inspect every connection and signal path in the Command Module. These tests were conducted to clear the way for mission launch.
- Worked on the emergency egress simulation using slide wire baskets to lower subjects to the ground to a waiting helicopter for transfer.
- JSC Mission Simulator and Training Facility were used to simulate actual flight conditions.
- A modified KC-135 was used to fly 20- to 30-second parabolas, simulating "zero gravity" environment for donning and doffing exercises and for the evaluation of space suit mobility. This type of testing enabled crewmen to practice important functions like eating and drinking, free-floating maneuvering and tumble-spin recovery.
- Wearing pressure suits, carefully weighted to natural buoyancy in the WET-F Facility, was used to test and evaluate space hardware. WET-F testing was achieved with great success by underwater simulations in an effort to solve the EVA challenges.

Not wanting to drift too far from his NASA roots, Mr. Dry developed and served as Coordinating Producer and Actor for a special video series that explains astronaut program entry requirements and discusses astronaut initial training and space exploration.

He was co-author of Early Childhood Phonics, an educational book with accompanying workbook based on lunar travel. He also authored a book, The Junior Astronaut Handbook, for young readers who want to become astronauts.

Mr. Dry spent his entire aviation and space career assigned to highly classified environments. Some of the work is too classified to be discussed in this document. At the present, Mr. Dry is Founder and President of Government Procurement Solutions, LLC a consulting firm that recognizes government opportunities for both Native America and small businesses.