

Preface

This book should have been written about half a century earlier! For such a great period in space history, more can be said about the personal contributions and stories of the early space pioneers who scrambled after the surprise of Sputnik to start the American space program. While I knew many of the people in the Space Task Group (STG) at the Langley Research Center in Hampton, Virginia, there are hundreds I didn't know. Even then, as a young man, I had little knowledge of their backgrounds and experiences. I was what they now call a "newbie." In those more formal days of the 1950s and early 1960s, we might be addressed as "young man." There were many of us in our twenties. Our managers were, for the most part, in their late twenties to middle thirties.

I've learned more about the STG people in writing this book than I ever knew at the time. It is difficult even now to find some of their names, let alone their contributions. The NASA History Offices at the Johnson Space Center (then the Manned Spacecraft Center) and the Glenn Space Center (then the Lewis Research Center) have, over the years, obtained oral histories from many of the Project Mercury people. The Langley History Office recently added a Space Task Group webpage with links to the Johnson oral histories. I have read most of them. Unfortunately many people didn't participate in the Oral History Project, with the result that their contributions are essentially lost. Some of the histories aren't available online but are VHS tapes held in storage somewhere. It is sad that the contributions of some very key people are not recorded anywhere that I could find.

In many cases, when I read the oral histories the individual says very little about their early STG career, focusing more on their later contributions to major programs like Apollo and the Space Shuttle. While I find these oral histories very interesting, the average reader today might view them as rather rambling and sometimes incoherent memories. To get an overall sense of what was going on, you would have to read a lot of them. I wanted to capture what these early Mercury space pioneers accomplished.

During 2015, in researching this book, I talked with many STG people who are now in their twilight years – as indeed am I. It seems easy for them to recall special events such as the spaceflights, but not the day-to-day particulars of their work over half a century ago.

They remember only some of their co-workers. Some of them have kept in touch, but most drifted apart over the years. To my great delight, I heard from one man who is now 93 years old and is able to recall events in great detail.

The STG only existed for three years. Almost immediately after NASA was itself formed on October 1, 1958 the STG was formally organized on November 3, 1958. Only three years later on November 1, 1961, the STG staff was formally declared part of the new Manned Spacecraft Center which didn't even physically exist. Everyone's badges changed, but it had little effect on those preparing for John Glenn's flight. Over the next eight months, people relocated to the as-yet-unbuilt Manned Spacecraft Center in Houston, Texas. They were temporarily housed in a variety of rented office buildings in Houston. We all wondered why we were leaving beautiful Virginia for what we considered the "Wild West." After John Glenn's flight, I took a trip to the proposed site and found cows in a big pasture. A now-famous photo of those cows is included later just to show you how things were in those days. It was hard to believe that out of 20 cities evaluated to host the Manned Spacecraft Center, Houston was chosen, especially considering its distance from the launch site and control center at Cape Canaveral in Florida. I have included a discussion of that decision.

When NASA was first established there was great organizational upheaval, with some people transferring to NASA Headquarters, some from one Center or Laboratory to another, and some to various aerospace contractors. A new agency was being pieced together to lead the Nation's new civilian space program. This involved bringing together people from many locations and organizations to tackle an unprecedented technical challenge. To express it in the context of the title of this book, it was a rather sudden and difficult birth!

I have made an attempt to write the story about the birth of NASA and the STG in three parts. The first part, "Setting the Stage," discusses the beginning of America's space program ranging from Sputnik to the creation of NASA out of many existing organizations. Then "Creating the Space Team" begins with the creation of the STG organization, explaining where people came from and where they ended up in the organization. This part ends with the decision to disband the STG and establish the Manned Spacecraft Center, but it lists some of the key decisions and lessons learned in management, engineering, operations, science, and spaceflight medicine. The third part, "Achievements," lists the major accomplishments of the STG and the Project Mercury team. This includes the facilities that were specifically created as well as the unique and creative mission designs, operational concepts, and methodologies. The story is wrapped up with some philosophical thoughts on the impact of this experience on future spaceflights, management of complex systems, political will, and national pride. I also predict the date of the first landing of humans on Mars.

These three parts are supplemented with many appendices that give more detail, including a significant number of biographical profiles that describe where these space pioneers came from and the work that they did, both in the STG and subsequently.

I describe the Mercury missions from operational, science, and medical perspectives. The astronauts were part of the STG and many of us worked with them as part of their daily work routines. Most of their time was spent on training and a variety of engineering and operational assignments. Only two astronauts flew during the three years of the

STG. In fact, more animals than astronauts flew during this period. The lives and contributions of the astronauts of Project Mercury have been well covered by many historians. Excellent books are referenced at the end of this volume.

In summary, the intent for this book is to capture as much as possible, the roles of America's first true space pioneers. Most are now in their twilight years. Many of those that feature in the history books are long gone, having taken the ultimate spaceflight. So the intent of this book is to chronicle as much as possible the Space Task Group's contributions to history; if not for the participants themselves then for their children and grandchildren.

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The Birth of NASA

The Work of the Space Task Group, America's First True
Space Pioneers

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