

CHAPTER 1

Setting the Scene for Human Spaceflights: *Men into Space* and *The Man and the Challenge*

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As both the United States and the Soviet Union began working toward the first human spaceflights in 1961, two significant programs appeared on American television. On NBC, *The Man and the Challenge* (1959–60) used the inspiration of Air Force Colonel John Paul Stapp's well-publicized rocket sled experiments to create a series featuring a fictional doctor/researcher whose scientific experiments probed the limits of human endurance. On CBS, *Men into Space* (also 1959–60) depicted the realistic adventures of Colonel Edward McCauley, head of a fictional American space program. Aimed at adults and executed with the cooperation of the Department of Defense, *Men into Space* offered a fact-based depiction of space flight in the near future of the budding space age. Both programs were produced by Ziv Television Programs, Inc., a unique Midwestern company known as the leading producer of first-run syndicated programming.

Ziv's two television programs represented a transitional moment in American space-themed television, one that provides both context and background for understanding how the first human spaceflights were received. In contrast to the popular "space operas" of the early and mid-1950s, both series addressed the challenges of going into space in realistic ways. In particular, *Men into Space* depicted one military-inspired vision of how a spacefaring future—and its space travelers—could look. For its part, even without leaving the ground, *The Man and the Challenge* explored the question of what kind of person would be best qualified to take the first steps into space. In the end, both shows glorified the ingenuity of man's technological prowess as they pushed back boundaries. Because of their depictions of gender, both male and female, and by depicting adventures based on actual scientific principles and practices, they also prepared television audiences for the public performances of technological achievement that human spaceflight provided and the risks they entailed.

The transitional moment these programs represented was fleeting. Because of changes in how programming was being created, independently produced network television soon vanished. As a result, both *The Man and the Challenge* and *Men into Space* each ran for only one season, 1959–60, yet in that season both shows tapped into contemporary interest in the science fact about what was possible for the men (and perhaps women) who pushed the boundaries. Analyzing the depictions of gender, science, and technology in these two TV programs reveals one part of the cultural contexts that helped shape the reception in the United States of Yuri Gagarin's flight and, even more so, Alan Shepard's mission as the first American in space, both in 1961.

Early 1950s Space Television

To appreciate how and why Ziv Television developed the two series, it is important to understand the wide variety of program formats, production processes, and business models that coexisted in the early years of television. Space adventure programs from the early 1950s were often fantastical, cheaply produced, and melodramatic because in many ways the business models that eventually created high-quality episodic television were still developing. However, such programs from the early and mid-1950s provided the backdrop against which *The Man and the Challenge* and *Men into Space* would have initially been received.

The very first such program, *Captain Video and His Video Rangers* (1949–55), known as "TV's first space opera," debuted on the DuMont Network on June 27, 1949. An inexpensively produced series, the live show was broadcast five times a week for six seasons. The lead character of Captain Video, assisted by a teen-aged Video Ranger, carried out an ongoing battle against the evil scientist Dr. Pauli. Wearing a military-style jacket with a lightning bolt across the chest, Captain Video operated from a mountaintop hideout full of dials and switches. The character also had amazing devices, cobbled together on the program's paltry \$25-a-week prop budget. Each episode also featured an incongruous interlude in which Captain Video would invite his viewing video rangers to watch clips of Western action pictures (drawn from the DuMont holdings). Such breaks both extended the show's length and allowed for set changes during the live program.¹

DuMont's business model for *Captain Video* remained rooted in radio production, with more money invested in advertising than in production. Mail-away premiums from the show's sponsors were the show's first merchandise. As a manufacturer of TV sets, DuMont aimed ultimately to sell receivers, not to make money through the programs themselves. DuMont executives actually saw so little value in the recordings of *Captain Video* that they destroyed them to avoid storage costs, choosing instead to reclaim the silver content in

the films. In the early years of TV programming, few people imagined that audiences might be willing to watch a television program more than once.²

ABC's long-running *Space Patrol* (1950–1955) reinforced the reputation of 1950s space programs as melodramatic. *Space Patrol* was a space-based police procedural, broadcast live. Wearing uniform tunics and peaked military-style hats, the *Space Patrol* cast had to memorize new scripts for each fifteen-minute daily show, later adding a thirty-minute live broadcast every Saturday. Live television (which accounted for 80% of network shows in 1953), although dynamic, had inherent limitations. For example, the space-themed special effects had to be done in real time. They could not be added or enhanced later. As a result, even with a significant production budget and talented staff, the effects could appear campy. Moreover, despite live television's reputation for conveying the excitement of live theater (and having a higher-quality broadcast picture than programs recorded using kinescopes, which filmed the picture shown on a monitor), such programming also held the potential for in-the-moment disasters. In one episode of *Space Patrol*, an actor playing a villain simply froze. The other actors improvised, pretending the character was now telepathic. Such scenarios were inherent in live TV.³

During this same time period, well-credentialed spaceflight enthusiasts (including such notables as author Willy Ley, engineer Wernher von Braun, and artist Chesley Bonestell) tried to compete with fantastical television programs by depicting spaceflight realistically. In *Space and the American Imagination*, Howard McCurdy argued that these men and several others, whom McCurdy called “space boosters,” self-consciously used popular media to present human spaceflight as realistic and achievable, in marked contrast to the period's fantastical science fiction. Their varied campaign included work on George Pal's Academy Award-winning *Destination Moon* (1950), a famous series of articles in *Collier's* magazine from 1952 to 1954, and collaborations with Walt Disney to produce space-themed, nonfiction television programs in the mid-1950s as well as the iconic Rocket to the Moon ride at the center of Disneyland's Tomorrowland in 1955. The space boosters' efforts shaped the discourse about human spaceflight for decades to follow.⁴

Some of those influences found their way into regular episodic television programs. *Tom Corbett, Space Cadet* (1950–55) earned a reputation as “easily the most scientifically accurate” of the contemporary space shows. Ley served as a consultant, successfully lending his critical eye to script reviews. Although the cast occasionally donned spacesuits, the restricted effects budget kept them in space uniforms most of the time, wearing exaggerated flight suits with dotted necklines and deep Vs on the chests, accented with an emblem bearing a rocket ship and a lightning bolt. Despite five successful seasons, *Tom Corbett*

had a rocky broadcast history. The program bounced from network to network, showing in successive seasons on four different television networks. CBS later created a copycat show, the short-lived *Rod Brown of the Rocket Rangers* (1953–54) starring a young Cliff Robertson, both to compete with DuMont's *Captain Video* and ABC's *Space Patrol* and to make up for allowing *Tom Corbett, Space Cadet* to go to ABC.⁵

Throughout the early and mid-1950s, the ongoing popularity of space-themed programs also inspired the resurrection of established space heroes. *Buck Rogers* and *Flash Gordon*, well-established multiformat franchises that had flourished in the 1930s, found new life in the early 1950s. ABC broadcast a live TV program of *Buck Rogers* (1950–51), for which no kinescope recordings survive. In 1954, a syndicated version of *Flash Gordon* (1954–55) was filmed in West Germany and France for syndication. By the mid-1950s, most television networks included a space show in their lineup.⁶

Even as late as 1955, however, the best formula for television production had still not yet been established. NBC's *Commando Cody, Sky Marshall of the Universe* (1955) was released first as a movie serial, demonstrating that television was still not viewed as an exclusive medium. To minimize costs, the show reused the Rocket Man costume from the Republic Film movie serial *King of the Rocket Men* (1949). Whenever the lead character (played by Judd Holdren) was not wearing the Rocket Man leather flight costume with its cumbersome metallic helmet, he wore a black military jacket with a rocket on the sleeve and a *Lone Ranger*-style domino face mask. Keeping Holdren's face partially covered presumably prevented him from gaining a following and demanding more money (and would have eased the transition to another actor if he left the show).⁷

The sets and costumes used in early 1950s space-themed TV programs reinforced the general impression that these were fantastic stories aimed at children, without any real scientific content. Most of the lead characters wore military-style uniforms accessorized with lightning bolts, rocket ships, or other symbols that suggested something futuristic. Likewise, the weapons and instruments used had elaborate technobabble names but little real explanation. Notably, most shows did not feature spacesuits or helmets. When space helmets were shown, as in the case of *Tom Corbett, Space Cadet*, their large bubble construction made it easy to see the actors' faces.

Examining the space operas of the early 1950s establishes not only the context against which later, more realistic, adult space programs would have been viewed but also the business environment in which they were produced. *The Man and the Challenge* and *Men into Space* were products of a particular set of circumstances in the structure of the television industry. Both shows were created by Ziv Television Productions, a company driven by Frederick W. Ziv, who

found a niche in television and radio production, became expert in filling it, and adapted his business models as the industry changed. To understand how these programs originated and why they did not survive, one must understand Ziv, both the man and the companies.

Ziv

Before Frederick Ziv became known as the “father of broadcast syndication” and his companies became the “first financially successful producers of large-scale syndicated programming,” he began as a young advertising executive in Cincinnati, Ohio. Looking to make his mark with his own agency, Ziv began targeting radio because, as a new medium, it presented a better opportunity for a newcomer than magazine or newspaper advertising did, being already dominated by established firms. Therefore, Ziv first developed what would become his lifetime business model by working in radio.⁸

Rather than simply buying advertising on established programs or stations, Ziv convinced his local clients that they could make greater impressions by sponsoring independently produced programs. Ziv’s radio shows, pitched by his agency’s salesmen to various local sponsors, included not only the programs themselves but also detailed plans for all of the promotional materials required to garner enthusiasm for the program, allowing them to compete against better-funded network shows. By 1948, even as his company continued to work in radio (producing more than twenty different radio series for national syndication), Ziv expanded this approach to include television.⁹

Like radio before it, TV relied on networks. Belonging to a network brought not only built-in programming but also prestige to a station. Network programs with high production values funded by national advertisers could only be broadcast by the group of stations affiliated with that network. (The networks favored live programming at least in part because it meant individual stations had to be affiliates to receive the one-time broadcasts, putting independent stations at a relative disadvantage.) But stations also needed programming during the non-prime-time hours for which the major networks did not provide it, and independent stations needed programming as well. Ziv Television Productions, Inc., which always remained based in the Midwest—eventually opening offices in New York and Hollywood but keeping its headquarters in Cincinnati—specialized in creating independent shows to be “syndicated” or sold directly to individual stations. Ziv eventually became known as the “most prolific producer of programming for the first-run syndication market during the 1950s.” Aided by a law degree from the University of Michigan (Ziv envisioned every sales pitch as a legal argument, anticipating counterarguments and preparing rejoinders beforehand), he was a savvy businessman who found his niche in syndication.¹⁰

A forward-looking entrepreneur, Ziv recognized emerging trends in television production. For instance, Ziv recorded the company's first major television series, *The Cisco Kid* (1950–56), a Western, on color film, even though neither recorded programs nor color sets were in wide use when the series began (nor, for that matter, even when it ended). But because the program was filmed in color and because Ziv foresaw a market for rebroadcasting television programs, *The Cisco Kid* survived in reruns well into the 1970s, outliving even Ziv's company.¹¹

Ziv's plan for success in television syndication focused on reliable, entertaining television programs in proven genres. As Frederick Ziv recalled in 1975,

It was obvious to all of us who had our fingers on the pulse of the American public that they wanted escapist entertainment . . . We [Ziv] did not do highbrow material. We did material that would appeal to the broadest segment of the public. And they became the biggest purchasers of television sets.¹²

Ziv sought out stars who needed no introduction, such as comedians Red Skelton and Eddie Cantor for variety programs, and proven formulas for dramatic pieces. As a result, Ziv Television specialized in half-hour male-oriented action adventure dramas, including such reliable genres as Westerns and crime or courtroom dramas, each written with a slight twist to keep them interesting. By the mid-1950s, Ziv was increasingly convinced of the TV audience's affinity for realistic programs, a trend that was reinforced in his mind by the financial success of *Science Fiction Theater*.

Produced for Ziv by Ivan Tors, who would later produce *The Man and the Challenge*, *Science Fiction Theater* (1955–57) was hosted by Truman Bradley, a former radio announcer. Each episode began with a science experiment, the principles of which inspired the drama that followed. Ziv believed that the success of this adult series would depend upon the veracity of the science (and thus the willingness of technically savvy industry sponsors, such as Conoco in Dallas, Texas, to support the show). As a result, the production team included a six-person research department with a \$75,000 budget for fact checking. The formula worked. For each of its 78 episodes, *Science Fiction Theater* was always first or second in the ratings. Such success reinforced for Frederick Ziv that "science fact" shows aimed at adults could be a bankable approach.¹³

The turn to more adult programming was in line with what other contemporary television producers were doing. For instance, in the late 1950s, Westerns aimed at adults, such as *Gunsmoke* (1955–75) and *Bonanza* (1959–73), became all the rage. Six such shows appeared in 1955–56, followed by eighteen the next year. Their successes created a boom. In the 1959–60 season, thirty different programs set in Western locales appeared on the air. The Western

frontier motifs that were so popular on television even informed how policy-makers framed the U.S. space program.¹⁴

Ziv's productions for 1959–60 aimed not only to capitalize on the trend toward adult genre programming but also to capture the contemporary interest in space exploration sparked by the space age (begun by the first artificial satellite, Sputnik 1, on October 4, 1957). Having a recipe for successful programming became increasingly important to Ziv as his company worked to compete in a rapidly changing television market. By 1956, TV had established itself as a successful medium: 72% of all American households had a set. But network executives had also learned how to make money with the programs themselves, rather than relying on just advertising or set sales. In 1956, the major networks began syndicating their own programs. To keep pace, Ziv Television changed its tactics. Rather than marketing independently produced programs to individual stations, Ziv began producing programs directly for the networks. Although he personally resented them, preferring independent syndication, the company's producers and writers were flattered to have their work broadcast on a major network, and he recognized the business value of the new direction.¹⁵

Men into Space

Men into Space was one of those offerings, produced directly for CBS and first appearing at 8:30 p.m. on Wednesday nights in the fall of 1959. Rather than a fantastical space opera, *Men into Space* was in many ways an extension of the space realism seen in programs such as *Tom Corbett*, *Space Cadet* and the work of space boosters from earlier in the decade. With high-caliber technical advice and plot supervision, *Men into Space* aimed "to give the public accurate, non-classified information on accomplishments, operations, known and anticipated hazards in space" (Figure 1).¹⁶

The Department of Defense agreed to support *Men into Space* as long as script approval was included. Captain M. C. Spaulding from the U.S. Air Force Ballistic Missile Division served as a technical advisor. The famous space artist Chesley Bonestell, who had published space paintings in *Collier's* and *Life* in addition to doing extensive work for Hollywood movies, developed the "space concepts," or production design, for the program. When it was broadcast, the final credits for *Men into Space* acknowledged the Defense Department, as well as the Air Force's Air Research and Development Command, Office of the Surgeon General, and School of Aviation Medicine. The reliance on the Air Force reflected contemporary expectations (and Air Force hopes) that the service would be the natural military branch to control future human spaceflight.¹⁷

Ziv recognized the value that subject matter authorities brought to a program. Beginning in 1953, the promotion for the anticommunist triple-agent



FIGURE 1. With authenticity bolstered by the Department of Defense's script reviews, Ziv Television's *Men into Space* (1959–60) depicted a robust human spaceflight program that included regular trips to the Moon by crews of multiple astronauts, such as this scene from "Water Tank Rescue" (October 28, 1959). *Men into Space* © Metro-Goldwyn-Mayer Studios, Inc. All Rights Reserved. Courtesy of MGM Media Licensing.

drama *I Led Three Lives* (1953–56) emphasized that the FBI reviewed each script, which were based on the writings of FBI counterspy Herbert Philbric. Ziv also cooperated with the U.S. Military Academy to produce a true-to-life show called *West Point* (1956–58). Likewise, Ziv's successful *Sea Hunt* (1958–61) received technical assistance from the Scripps Institute of Oceanography, University of California. The participation of recognized space experts reinforced the premise of *Men into Space* as a fact-based depiction of the near future in spaceflight.¹⁸

Originally slated to be called *Moon Probe*, *Men into Space* featured a rotating cast of various support crew (astronauts and other scientists) making repeated missions to the Moon, led by Colonel Edward McCauley (portrayed by Bill Lundigan). After an opening montage of stock footage of a V-2 (the captured German liquid-fuel rocket) and glimpses of the fictionalized characters who would be the program's heroes, a voiceover explained the program:

The story you are about to see has not happened, yet. These are the scenes from that story. A story that *will* happen as soon as these men

are ready. This is a countdown. A missile is about to be launched. It will be the XMP-13. "XMP" meaning eXperimental Moon Probe. A missile that will carry three human beings into outer space.

Variations of the dialogue about a story that would soon be true, once the men were ready, introduced each episode. In the opening lines of dialogue of the first episode, McCauley gave his eagle colonel's insignia to his son Pete (portrayed by Charles Herbert) to hold for safekeeping until he returned from the mission. The music swelled as McCauley kissed his wife, Mary (played by Angie Dickinson), goodbye. McCauley's interactions with his family throughout the series continued to reinforce the humanity of the men going into space.¹⁹

Having a press conference depicted within the first episode allowed the mission to be explained to the viewing audience, both before the launch and during the flight. Next, the slow preparations for the vehicle's launch (including, in the first episode, counting down steadily from forty) featured continual cuts between the men in the vehicle and the men at mission control. Stock film of various rocket launches provided the footage of the fictional launch. But the episode's drama finally developed when the rocket's second stage failed to separate. McCauley had to go outside the vehicle to cut it loose as the military leaders on the ground continued to explain the scientific principles to the assembled audience (and thus to the viewers). Ultimately, McCauley was knocked away from the vehicle but was rescued after tracking stations around the world, including a Soviet station, helped to locate him for retrieval. In the end, international cooperation became one of the episode's final lessons. As McCauley reminded another officer during the mission debriefing, "For one half hour, the entire world made one human life more important than anything else."²⁰

In addition to learning something about realistic plans for spaceflights and the risks that could be faced, viewers watching these episodes heard rationales for going into space. Within the first few minutes of the first episode of *Men into Space*, a newspaperman asked McCauley straight out, "Why?" McCauley's reply evoked British mountaineer George Mallory's famously simple answer about climbing Mount Everest: "Because it's there." McCauley addressed the press conference with, "If a mountain [exists], somebody has to climb it. The mountains on the Moon just happen to be a few hundred thousand miles higher. Let's call it a way of life . . . Let's say science is a way of life." McCauley's answer provided the first of many justifications for human spaceflight *Men into Space* would provide.²¹

In the second episode, "Moon Landing," two additional reasons for making a space voyage arose in the first few minutes. After a briefing, a senator, introduced as the chairman of the president's space committee, questioned the

cost: "Do you know how many billions are being spent to get you four men up there?" "Yes, sir, I do," McCauley replied, "And I believe it is a good investment. As you know, practical applications to Moon conquest are enormous." Although McCauley did not offer any details to buttress his claims, his colleague quickly offered a more philosophical rationale for the flight. Dr. Russell answered,

Well, nothing stands still, Senator. Life began in the sea, groped onto the land, and with intelligence and time, it staggered into the sky. Now we are leaping into space. We are ready. Spaceflight is only a natural, inevitable step in evolution. We have to go sooner or later. We might as well make it sooner.

To reinforce the point, McCauley concurred, "He's right."²²

The rest of the second episode underscored the value that McCauley and his crew placed on the mission, as well as an additional practical application of the trip. While exploring the lunar surface, McCauley explained how the lunar atmosphere's clarity would facilitate the astronomical observations made from a Moon-based telescope. But deploying the telescope had a high cost. While setting it up, Dr. Russell, the character who spoke so eloquently about the need for spaceflight in the episode's opening minutes, collapsed from injuries sustained during the trip, the severity of which he hid from McCauley because he wanted to complete the mission. After his death, as his last request, the crew left Russell on the lunar surface next to the telescope. Later, back on Earth, Russell's mother tells McCauley that she is satisfied that her son died doing what he wanted to do. Russell's death illustrated the officer's dedication to the spaceflight cause and the integral roles that scientists would play in a future military astronaut corps. (*Men into Space* did not anticipate the distinctions between scientist astronauts and pilot astronauts that became so important in the actual civilian astronaut corps, emphasizing instead the unifying military affiliations of its crew members.)²³

The question of putting lives at risk emerged again in an episode titled "Water Tank Rescue." An opening scene, set with an astronaut's family at his home, dramatized the risk to the men involved by contrasting the son's naïve enthusiasm (comparing the upcoming mission to a "milk run") with the wife's worried face. Her concerns were borne out when her husband had a heart attack on the Moon. Doctors on Earth quickly determined that the force of launching home would kill him. Fortunately, McCauley and the rest of the crew were able to improvise a water tank device that would supposedly cut the acceleration forces and bring him home safely. Although the science behind this solution was ultimately faulty, the show illustrated how ingenuity could compensate for distance, reinforcing the broader point that the United States has the capabilities to solve potential problems.



FIGURE 2. Lead actor William “Bill” Lundigan posed for this *Men into Space* publicity shot wearing the show’s costume space suit, modeled on real examples of contemporary military flight suits and prototype spacesuits. *Men into Space* © Metro-Goldwyn-Mayer Studios, Inc. All Rights Reserved. Courtesy of MGM Media Licensing.

Although initially dressed in real Navy full-pressure suits (the credits for the first episode noted “space suits worn in outer space sequences [were] provided by the United States Navy”), the show’s cast quickly switched to fictional costumes based on state-of-the-art spacesuit designs (Figure 2).²⁴ The head-to-toe silver costume spacesuits worn by McCauley and his crew were almost certainly inspired by actual prototype spacesuits that had been publicized as early as 1957. The silver X-15 suit was a full-pressure high-altitude flight suit developed by David Clark for pilots to wear when flying the X-15, a joint Air Force–National Aeronautics and Space Administration (NASA) experimental rocket plane that could reach the edge of space. Unveiled to the public in a *Los Angeles Times* article in 1957 and featured on the cover

of *Life* magazine in January 1958, the X-15 suit featured a coverall of aluminized nylon (nylon with a vacuum-blasted aluminum coating). Whether that layer actually provided additional heat resistance or radiation deflection (as the suit’s designers claimed) or if, as X-15 test pilot Scott Crossfield later recalled, it simply made the suits look more photogenic, “like a spacesuit should,” the silver-colored spacesuit became the image of the future space traveler. The famous Project Mercury spacesuit developed in 1959 by Goodrich for NASA also featured an aluminized nylon outer layer.²⁵

The images of the spacefarer depicted by McCauley and his space crew suggested both high-tech realism based in contemporary spaceflight research and the potential interchangeability of spaceflight participants. In each episode of *Men into Space*, McCauley remained the central character, but other crewmates proved to be largely interchangeable. New characters and new actors appeared each week. Dressed in identical silver spacesuits with full helmets that carried an Air Force logo, the supporting characters became hard to distinguish from each other, especially during their fictional Moon walks. To ease this complication, each of the *Men into Space* astronauts had his surname stenciled on his space helmet above the clear visor so that viewers could tell them apart.

(Facing an analogous problem, NASA later added a red stripe to the spacesuits worn by Apollo mission commanders in order to distinguish them from their fellow moonwalkers in photo and video records.)

As the series progressed, the plots for *Men into Space* dramatized emergency scenarios that the Department of Defense reviewers determined to be believable. The rescue of a rogue spaceship, the defusing of a nuclear power plant aboard an unmanned missile, a collision between a spaceship and a refueling tanker, and a runaway satellite all put McCauley and his crewmen to the test (it was an adventure series, after all). Week after week, viewers saw McCauley and his various compatriots persevering despite significant risks. Whether endangered by their own actions or from unforeseen phenomena, McCauley and the fictionalized American space program depicted in *Men into Space* pursued spaceflight's benefits, which included an orbiting space station and regular crews stationed on the Moon. The message that the benefits outweighed the risks was clear.

The Man and the Challenge

Three weeks before *Men into Space* appeared on TV, *The Man and the Challenge* began the broadcast of what would eventually be thirty-six black-and-white half-hour episodes. Produced by Ivan Tors for Ziv, the show aired on NBC on Saturday nights at 8:30 p.m. The show's premise was inspired by aeromedical researcher John Paul Stapp and his contemporaries, who personally tested how the human body would react to the predicted rigors of spaceflight (Figure 3). Originally, the program was going to be titled simply *Challenge*. But Ziv's producers worried that the show would be confused with a game show, evoking the quiz show scandals of 1958 and 1959. As a result, they added "The Man" to the title, a change that ultimately benefited the program by putting the emphasis on the central character, Dr. Glenn Barton (played by George Nader) of the fictional Human Factors Institute.²⁶

The opening titles reinforced the character's parallels with the adventurous Stapp, who famously strapped himself into a rocket-propelled sled with water brakes in order to test the human body's reactions to acceleration and deceleration. Each episode began with a darkened silhouette of a man sitting in an instrumented chair on a rocket sled. As the first part of the title, "The Man," flashed on screen, the profile illuminated to reveal the main character, Nader as Barton, donning a crash helmet with a darkened visor. As "and the" appeared, a film clip of Stapp's well-publicized rocket sled experiments began. The last part of the show's title, "Challenge," appeared superimposed over plumes of spray from the water reservoir. The opening title ended with a close-up of Nader removing a water-spattered helmet to reveal his face (which, unlike Stapp's, remained unbruised), a final focus on the man at the center of

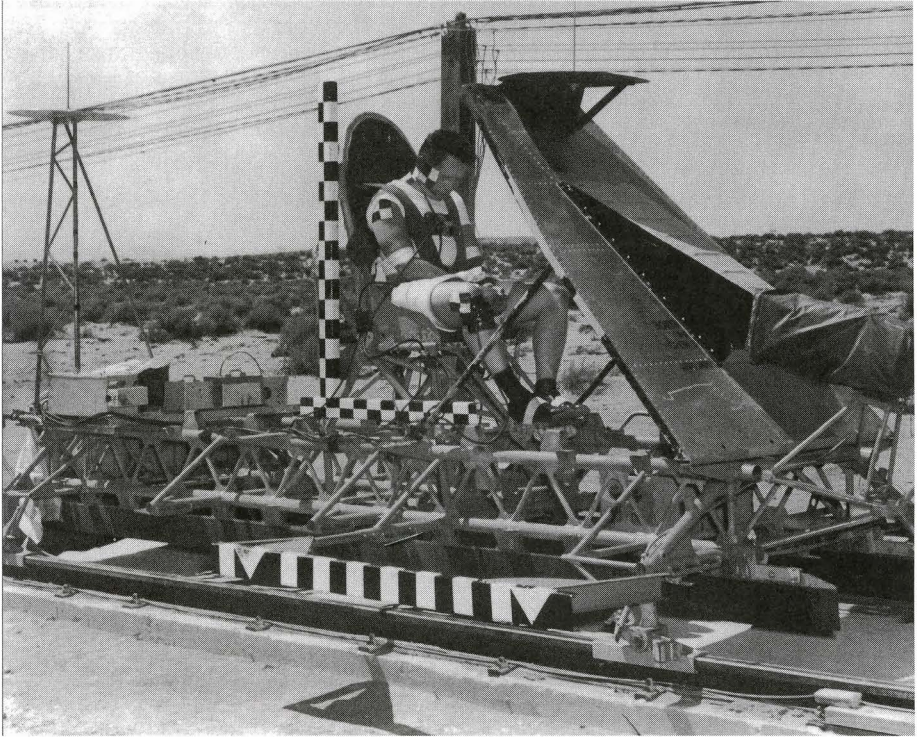


FIGURE 3. *The Man and the Challenge* drew inspiration from contemporary aerospace researchers such as Air Force Colonel John Paul Stapp. Stapp's personal participation in rocket sled experiments, pictured here, inspired the program's title sequence. Courtesy of AFTC History Office.

the show. Each week, the episode that followed tackled a dramatized problem based on contemporary research on human physiology.²⁷

Although *The Man and the Challenge* never had an episode with an outer space setting, the question of imminent human spaceflight loomed over much of the series. In an episode titled "Experiments in Terror," when Glenn Barton found himself the unwitting subject of several tests of his reactions, nerve, and bravery, the doctor overseeing the tests explained directly, "We need . . . highly-specialized men, who will one day land on the Moon and neighboring planets. Who can withstand pain, terror, cold, heat, hunger, sleeplessness, weightlessness, and isolation."²⁸ Likewise, when Barton subjected two elite pilots to the unusual endurance test of entering them in a daylong cross-country stock car race, he explained, "They were willing to try to undergo any experiments deemed important for space progress."²⁹ Like the researchers on which the show's premise was based, the fictional Barton conducted his experiments in spaceflight readiness using elaborate simulations.

Different iterations of episode scripts, now housed in the United Artists collection at the Wisconsin Historical Society in Madison, reveal that an even

greater number of spaceflight references appeared in early versions of scripts. Used to justify the action in initial drafts, explicit references to spaceflight sometimes disappeared in the final filming or editing. This was especially true once the program had a following and the show's premise had been established. In later episodes, the action sequences required less supporting explanation.³⁰

Because the series' premise remained earthbound, the only spacesuits appeared in an episode titled "The Visitors." In that installment, three experimenters, including Barton, traveled to a remote desert testing site to field test prototype "planet suits." Unlike the spacesuits shown in *Men into Space*, however, these imagined prototype suits featured large helmets with elaborate antennae. In the plot's dramatic twist, poachers trespassing on government land concluded that the researchers were space aliens and hunted them with rifles. Because the hermetically sealed suits supposedly required the wearers to be in a pressure chamber to remove them safely, the men had to rely on their wits until their rescue. Despite the lack of spacesuits, throughout its run *The Man and the Challenge* directly explored the question of what kind of person should be an astronaut.³¹

In fact, the very first episode of the series explored the qualities needed for spaceflight in both men and women. In "Sphere of No Return," Dr. Glenn Barton appeared inside a spacecraft simulator in a pressure chamber with two male test subjects. As three men worked through exercises, Barton explained the experiment in a voiceover: "One danger man will have to face in space is a sudden puncture of his spaceship by a meteorite." Barton then raised a gun (behind and out of sight of the two male subjects) and shot the thick glass port-hole (Figure 4). Immediately, the simulated craft, presumably inside a vacuum chamber, began to vent atmosphere. As Barton observed, one of the men tried to plug the hole with a large suction device but fumbled it. Barton's voiceover dramatically identified the problem, which was not the device but the man: "Mason panicked." Demonstrating the cool competence that defined the series' lead character, Barton completed the repair. Mason, who had otherwise passed all preliminary tests with flying colors, had to be replaced. Spaceflight required both physical and psychological toughness.³²

The focus on sorting out psychological weaknesses contrasted with the striking visual display of physical masculinity. For reasons that were never explained—and never seemed to be necessary except to emphasize their bodies—all of the men in the spacecraft simulator, including Barton, trained with their shirts off, bare chested. Despite the sensors taped to their chests, their headband receptors were apparently tracking their vital signs, so the bare chestedness was not plot related. Nonetheless, each of the physically strong young men wore only tight shorts and athletic shoes and socks. To the viewer,



FIGURE 4. In this scene from *The Man and the Challenge*'s first episode, George Nader as Dr. Barton (left) prepares to shoot a hole in a spacecraft simulator to test the mettle of two subjects. Spaceflight required physical and mental toughness, traits often equated with rugged masculinity at the time, a relationship that this episode questioned. *Man and the Challenge* © Metro-Goldwyn-Mayer Studios, Inc. All Rights Reserved. Courtesy of MGM Media Licensing.

they all appeared to be equal examples of muscular manhood until the experiment revealed Mason's weakness.

But *The Man and the Challenge* also investigated whether women might possess the qualities needed for spaceflight. As the character of Glenn Barton explained in "Sphere of No Return," "if there are going to be colonies in outer space, the pioneers can't all be men." Appropriate female test subjects were easily found at Barton's Human Factors Institute. The episode's opening shot showed three men in lab coats sitting at consoles, while Barton's assistant Miss Allen (played by Joyce Meadows) occupied another console in the foreground. Rather than test her openly, Barton initially measured Allen's abilities by taking her on a date to an amusement park, where he surreptitiously timed her reactions using a stopwatch.³³

When Barton decided to include Allen in spaceflight readiness experiments, the romantic overtones of Miss Allen's obvious crush on Dr. Barton overshadowed her participation—and established him a charismatic and romantically attractive leading man. Having measured her abilities at the amusement park, Barton included Allen in a series of tests, pairing her with

Cory, a male subject who had also already proven himself. Throughout a pressure chamber simulation test and a real high-altitude balloon flight, both Allen and Cory experienced the psychological dangers of spaceflights. The group's success through a series of adventures in the gondola (avoiding power lines, dodging thunderstorms, and surviving hypoxia) ended with a safe landing thanks to Dr. Barton's quick thinking. In the final scene, Miss Allen confessed her attraction. Both she and Barton realized, however, that his dedication to work made a relationship impossible.³⁴

The question of women's physical capabilities recurred several times throughout the series. In an episode titled "Escape to Nepal," Barton included an expert laboratory technician and linguist named Marilyn Sidney (portrayed by Joan Granville) in his high-altitude mountain-climbing expedition because "one day women might be indispensable in spaceflight." Although Sidney also made sandwiches and coffee as the group climbed, she demonstrated her value to the expedition through her linguistic skills.³⁵ Barton again tested women for possible spaceflight stresses in an episode titled "Astro Female." After narrowing down his possible candidates from the hundreds who volunteered, Barton tested four and concluded, in a voiceover describing the reaction of another colleague, "Dr. Cremer's eyebrows went up. He couldn't believe it. But it was proven. What I had always believed: the female body is even better equipped to handle radical changes than the male's [is]." The show concluded with the summary statement that "when the chips are down, the so-called 'weaker sex' is a myth."³⁶ Such episodes reflected contemporary scientific curiosity about women's physical abilities even as American society reinforced narrow gender roles, especially for married, middle-class white women.³⁷

In contrast, women in *Men into Space* served primarily to express fears unacknowledged by men. When a lead researcher's wife questioned the safety of flying a nuclear-powered rocket in "Lost Missile," her husband dismissed her question before it could be answered, saying to McCauley, "Now, isn't that just like a woman?"³⁸ Such fears had no place in a spacecraft. In an early episode, "Moon Landing," McCauley offered the astronauts' wives the backhanded compliment that as a man, he would not be able to endure such worrying; he would much rather fly to the Moon than sit at home, watching the risky venture. When they were not reflecting the emotion of the drama, however, women in *Men into Space* represented dangerous distractions. In an episode titled "Moonquake," an astronaut preoccupied by concerns about his injured wife, who had been in an automobile accident, put the crew in danger.³⁹ Likewise, in "First Woman on the Moon," the only episode of *Men into Space* with a woman shown going into space, Renza Hale, the wife accompanying her scientist husband on a mission,

caused problems for the crew when she refused to acknowledge the need for her own protection.⁴⁰

In *The Man and the Challenge*, the exploration of gender and capability became metaphorical as well as literal. In the second episode, “Maximum Capacity,” Dr. Barton worked with three world-class American male skiers to answer the question, “Are skiers better qualified to function and survive among certain extreme conditions?” Quickly, however, the episode revealed itself to be concerned with spaceflight—and national spirit. When one skier was afraid of a slope called Madden’s Ridge, described as “a steep three thousand foot drop,” Barton exhorted him to act by appealing to a national need for psychological toughness:

Let’s change the name of Madden Ridge. Let’s call it outer space. We gonna give that up too without a try? We weren’t the first with jets. We weren’t the first with a satellite. Somebody else was. The North Pole is our new frontier. Our radar posts are scattered all over the Arctic. Finland was saved once by the quality of her ski troops. Could we do the same thing if it happened in Alaska? Or are we just going to keep on being second best from here on in?⁴¹

The message was clear: getting the skier to attempt an extreme slope modeled the national psychological toughening required for cold war success. According to these episodes of *The Man and the Challenge*, spaceflight would require a particular kind of toughness, both physical and metaphorical, often coded as masculinity and tied to national prestige.

Different Models of Masculinity

Such explorations reflected the cultural context. The late 1950s and early 1960s were a historical moment of gender anxiety. The rigid gender roles asserted after the end of World War II, described so effectively by historian Elaine Tyler May in *Homeward Bound*, seemed to be breaking down. What was called profeminism, the first evidence of what would become the Second Wave of the women’s movement, was being felt. At the same time, men suffered from a crisis in masculinity created by other cultural aspects of 1950s suburban life, including “momism,” “organization men,” and bureaucratic softness. The reactions to the “Sputnik moment” that called for a return to American frontier ideals also underscored cultural concerns about a loss of masculine toughness. Historian Robert D. Dean has argued that President John F. Kennedy’s foreign policy cannot be understood without appreciating how ideologies about masculinity, acted out through cold war assessments of strength and weakness, underlaid his administration’s decision making.⁴²

A reassertion of traditional masculinity became a central message of several episodes of *The Man and the Challenge*. In “Odds Against Survival,” Barton brought three prominent scientists and their wives aboard a nuclear submarine under the pretense that he had been ordered to rescue them from nuclear annihilation prompted by a European conflict. The scientists slowly adjusted to their confinement and began to seek survival solutions (which was, of course, the real test: how people could survive the extended confinement thought to be needed to outlast the aftereffects of a nuclear blast). At the same time, one of the scientists, the henpecked Dr. Robinson, learned to assert himself. Only as he took on a more traditional manly role was he able to help save the group—and his marriage.⁴³

However, headstrong, unyielding cockiness was explicitly identified in several episodes as undesirable for space flights. In “White Out,” Barton explained in the opening voiceover that “with manned interplanetary flight only years away, the problem of personnel for spaceships was becoming more acute. What was the best personality, physical, and psychological, for men in command positions?” Through a high-seas experiment with several highly capable test subjects aboard a sailing ship, Barton exposed one of them, John Napier (played by Keith Larsen), as overly assertive. Napier assumed too much responsibility, relied too much on his own supposed superiority, and ultimately proved unable to cope with even small setbacks, a dangerous combination for leadership in space.⁴⁴ Likewise, in an episode titled “Hurricane Mesa,” Barton required a test pilot to become a clerk for ejection seat tests using dummies on a rocket sled. The man’s successful adaptation to the boring job demonstrated that careful record keeping would be just as vital as human risk taking in the new space age.⁴⁵ Finally, an episode about the psychological conditions astronauts could face while confined in a floating spacecraft awaiting an ocean rescue ended with the reassertion of the importance of psychological screening for all space candidates.⁴⁶ The strength and tenacity needed for spaceflight must be a certain kind of masculinity, not uncompromising machismo.

In *Men into Space*, Colonel Ed McCauley exemplified contemporary masculine ideals (Figure 5). In addition



FIGURE 5. Bill Lundigan portrayed Colonel Ed McCauley as an ideal 1950s man: level-headed, action-oriented, and unflinchingly loyal to family and country. *Man and the Challenge* © Metro-Goldwyn-Mayer Studios, Inc. All Rights Reserved. Courtesy of MGM Media Licensing.

to being a calm, deliberate leader of men (a model military officer), he was also a faithful husband and family man who bought his son a model rocket because he had to miss one of the boy's little league baseball games because of a mission. One scholarly analysis of 1950s television summarized the Colonel McCauley character as a reflection of the ideals of the time:

McCauley represented one of those quiet, heroic figures which have now gone out of style. As the series developed, he evolved into almost a perfect paradigm of the way America was then pleased to view itself. At a time when the military was held in high esteem, McCauley was proudly exhibited as the best that the military had to offer. His presence was a reassurance to the nation that its welfare was in strong capable hands.⁴⁷

In fact, Bill Lundigan, the actor who played McCauley, sometimes asked for script changes when he thought that the character was being depicted as too perfect to be believable. In the interest of dramatic tension, McCauley's crewmates had more license to be imperfect.

In comparison, Dr. Glenn Barton of *The Man and the Challenge* modeled an adventurous and challenging masculinity that was fit, capable, daring, and flirtatious—but ultimately married to his work. He was handsome and dashing. He was also somehow immune to the physical challenges that his subjects

faced (even when he shared the same space with them). In the first episode, in which Dr. Barton tested people aboard an unpressurized balloon gondola, he watched, utterly unaffected by the thin atmosphere, as the other test subjects struggled to breathe, focus, or move. In most perilous situations encountered in the show, Barton provided the model for bravery, wits, and strength that allowed the situations to be resolved (Figure 6).

However, the muscular masculinity on weekly display in *The Man and the Challenge* remains open to multiple readings, especially in retrospect. For most of his adult life, George Nader was as openly gay as one could be in Hollywood in the 1950s. He met his life

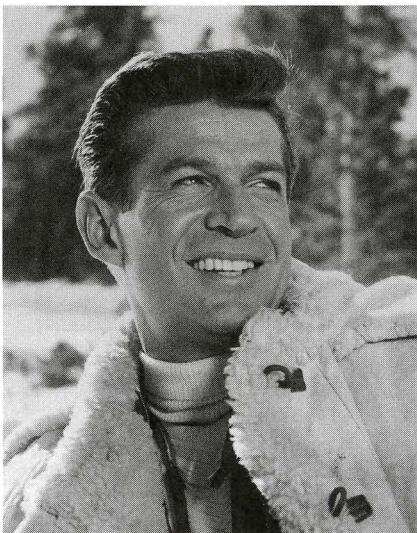


FIGURE 6. The dashing, dedicated, and daring scientist Dr. Glenn Barton was depicted by George Nader, who was in his personal life as openly gay as one could be in Hollywood in the 1950s. *Man and the Challenge* © Metro-Goldwyn-Mayer Studios, Inc. All Rights Reserved. Courtesy of MGM Media Licensing.

partner, Mark Miller, in 1947. They set up a household together, remaining together as a couple for 55 years, until Nader's death in 2002. Although neither came out publicly until 1985 after the death of their close friend and Nader's former Universal Studios colleague, Rock Hudson, Nader and Miller lived together openly. Nader resisted some of the studio's most extreme suggestions for disguising his sexual orientation, participating in public dates with Hollywood actresses but refusing to consider a sham marriage to a female secretary. Cast as a beefcake actor, Nader ultimately became frustrated with the opportunities Universal offered him and went out on his own in 1958 (thus making him available to star in the Ziv production of *The Man and the Challenge* in 1959). By 1964, he and Miller moved to Germany to explore Nader's options overseas. Nader's identity as a gay man would not have been known publically when *The Man and the Challenge* aired, but the assertive heterosexuality emphasized in his performance as Dr. Glenn Barton—and, indeed, the assumption of straightness at the core of most contemporary assertions of masculinity—is ironic in hindsight.⁴⁸

Setting the Stage for Spaceflights

Projections of masculine strength, as demonstrated by McCauley in *Men into Space* and as examined by Barton in *The Man and the Challenge*, proved to be critical contexts for the first human spaceflight missions. The first such flight, Yuri Gagarin's single orbit on April 12, 1961, came just five days before the United States' very public failure in the invasion of Cuba by covertly trained Cuban exiles at the Bay of Pigs. The combination of two perceived defeats undermined President John F. Kennedy's image of taking a strong stance against worldwide communism.

Kennedy's cold war foreign policy was often cast, at the time and by the administration, in gendered terms of masculine strength. As Robert D. Dean has argued about Kennedy's diplomatic choices,

Fear of the consequences of being judged “unmanly” influenced the reckoning of political costs or benefits associated with possible responses to those threats. In this sense, gender must be understood not as an independent *cause* of policy decisions, but as part of the very fabric of reasoning employed by officeholders.⁴⁹

President Kennedy and his New Frontiersmen saw the space race in the same framework of strength versus weakness that imbued the rest of his foreign policy.

Alan Shepard's successful suborbital mission on May 5, 1961, became part of Kennedy's decision calculus about international displays of technological strength. Even before Shepard flew, White House decision makers were debating the nation's space policy. A week after Gagarin's flight, President Kennedy

sent a memorandum to Vice President Lyndon B. Johnson asking, "Is there any other space program which promises dramatic results in which we could win?" Johnson's reply confirmed Kennedy's concerns about American prestige abroad and suggesting possible directions for the U.S. space program. In response, Kennedy declared before a joint session of Congress that the United States would complete a human lunar landing "before this decade is out." Amazingly, when the president committed the nation to that ambitious goal, American human spaceflight experience totaled fifteen minutes and twenty-eight seconds (the duration of Shepard's mission just three weeks earlier). The lunar landing decision illustrated how deeply Kennedy felt the imperative to exhibit strength, not weakness, in the cold war.⁵⁰

Would ordinary Americans who watched these historic events unfold in 1961 have linked them to what they saw on television during a prime-time space-themed drama broadcast over a year earlier? Did they remember the depictions of masculinity in *Men into Space* or *The Man and the Challenge* as they heard about Gagarin's or Shepard's flights? Probably not directly. But the social and cultural contexts that guided Frederick Ziv as he produced those programs also shaped the conditions under which high-level political leaders considered American prestige and made real decisions about actual spaceflights.

In their short lifetimes, *The Man and the Challenge* and *Men into Space* reflected the contemporary state of thinking regarding spaceflight's risks and those who would soon assume them. Five months before these shows first aired, NASA had already announced that seven male jet test pilots would be the United States' first astronauts. But by the time Gagarin and Shepard flew their history-making missions, *Men into Space* had aired the rationales for spaceflights and justified the risks, and *The Man and the Challenge* had dramatized the physical and psychological demands that future space travelers would face. Together, these programs emphasized assertions of toughness and determination, coded as masculinity, both for individuals and for the nation.

The Coda, or How Does This Story End?

Men into Space and *The Man and the Challenge* represented a very different cultural moment than the space-themed shows that followed in the 1960s. By the time human spaceflight was well underway, viewers looking for realistic television programs about outer space found instead family sitcoms with space themes, such as *The Jetsons* (1962–63), *My Favorite Martian* (1963–66), *Lost in Space* (1965–68), and *I Dream of Jeannie* (1965–70). Such programs recast changing family and gender dynamics in space-themed settings but did not consider seriously the scientific underpinnings of spaceflight.⁵¹ Although *Star Trek* (1966–69) did treat spaceflight as a central issue, the program still used its

space setting primarily as a way to address contemporary social and cultural issues back on Earth.

Why was the serious consideration of human spaceflight on prime-time television so brief? For Ziv, the answer was that the industry changed. After the major television networks began producing their own syndicated programs, opportunities for independently produced series diminished quickly. In 1956, when the networks entered this market for the first time, there were twenty-nine first-run (independent) syndicated programs on the air. Four years later, there were ten. By 1964, only one remained. Ziv Television did not survive the transition.⁵²

As Frederick Ziv recalled, by the end of the 1950s, the networks were demanding business agreements that made it impossible for independent production companies to compete, ultimately leading to his decision to sell.

The reason I sold my business is because I recognized that the networks were taking command of everything, and were permitting independent producers no room at all . . . The networks demanded a percentage of your profits, they demanded script approval, cast approval . . . You were just doing whatever the networks asked you to do. And that was not my type of operation. I didn't care to become an employee of the networks.

Proud of his company's independence, Ziv chose to leave the industry rather than compete on disadvantageous terms. In July 1959 (just months before *Men into Space* and *The Man and the Challenge* went on air), he sold an 80% interest in Ziv Television to investors for a reported \$14 million. A year later, United Artists acquired both the final 20% from Ziv and the initial 80% share from the banking groups. Frederick Ziv retired in 1965, after thirty-five years in the business.⁵³

Would *Men into Space* or *The Man and the Challenge* have lasted more than one season if Ziv Television had survived to promote them? Perhaps. But *The Man and the Challenge* had stiff competition, airing each week opposite the iconic and, by that time, firmly established family situation comedy *Leave It to Beaver* (1957–63) on ABC. Also, *Men into Space* suffered from some of the earnestness and rigidity that was a by-product of official Department of Defense review. Although they left the airwaves after one season, thanks to Ziv's business model, both shows survived in reruns, giving them another chance to make an impression on their audiences. In the end, by depicting realistic adventures based on actual scientific principles and practices, *Men into Space* and *The Man and the Challenge* prepared television audiences for the technological achievements and public performances of risk-taking masculinity that human spaceflight soon provided.

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