

Air and Space this Week

Item of the Week

May Day! May Day! May Day!

Originally appeared April 26, 2021

KEY WORDS: Maynard Smith Snuffy Medal of Honor Richard Hetherington O’Kane
USS Tang Francis Gary Powers U-2

Three historical events on May 1 (May Day) qualify for the use of the international aviation distress call: the circumstances involving the action in which B-17 enlisted crewman Maynard Smith won the Medal of Honor (1943), the rescue of 22 downed airmen off Truk by the U.S. submarine Tang on May 1, 1944, and the May 1, 1960 shooting down of the U-2 spy plane of Francis Gary Powers (OK, he didn’t make the call, as it would have alerted Russians to his condition, not that it mattered).

“Snuffy” Smith and the Medal of Honor

Maynard Harrison Smith was born on May 19, 1911 in Caro, Michigan. His family had some money, and he grew up as a spoiled and trouble-prone kid that nobody liked, for good reason. He skidded through his teen years and early 20s, living off family money as long as he could. He fathered a child and was compelled to pay child support, which proved to be his downfall. Hauled before a judge for failure to pay in 1942, he was given a choice: jail or military service. He might ought to have picked the former, but

A group of 30 inductees from his county were assembled on the courthouse steps for a celebratory group photo, when a squad car drove up and dumped Smith, in handcuffs, to join the new members of the U.S. Army, all at least ten years his junior.

He was a problem child in basic training, detesting having to take orders from much younger men. He picked up the nickname, “Snuffy,” in part because of his small stature and in part because of his disagreeable personality, both attributes of a prominent comics character of the day.

Smith resolved to get a bit of rank to help him put up with his detractors, and shocked his basic training instructors by putting in for aerial gunnery school, a very dangerous role, but one with a higher promotion rate (due to attrition by KIA/WIA). Smith graduated and was assigned to the 306th Bomb Group based in England. His squadron was equipped with B-17s, and Smith’s small size and training made him an ideal candidate to be a ball turret gunner, very tough duty.

He was assigned as a replacement crew member on a B-17 that was going to raid German submarine pens (a difficult target with the bombs then in use) in St. Nazaire, France (which was extremely-well defended by both anti-aircraft artillery and fighter planes). It would be his very first combat sortie. The date: **May 1, 1943.**

The bombing phase of the mission went well, but was ineffective, and resistance was light, likely due to cloud cover. But the lead plane's navigator screwed up and led the squadron over Brest, France, also heavily defended, and all hell broke loose. Heavy AAA fire and defending FW-190s blasted the squadron, including Snuffy's plane.

His B-17 took heavy damage amidship right away. Avgas poured from ruptured fuel tanks, feeding a blazing inferno. The plane's electrical system was shot out, rendering the ball turret unusable. The fire was so bad that three of the crew bailed out immediately, at least one of them without a parachute; all three were never seen again.

But as is sometimes the case, the ne'er-do-well rose to the occasion. He became a one-man fire department, exhausting every fire extinguisher available while tending to the wounded tail gunner. He was a whirlwind, fighting fires, helping to the tail gunner, and using both waist guns to drive off attacking fighters. The fire was so intense in places that ammo began cooking off. He threw the burning ammo belts and everything else not nailed down out of the gaping holes in the fuselage to lighten the bomber. For an hour-and-a-half! When the last fire extinguisher was expended and thrown out, he wrapped himself in discarded clothing and fought the raging fires by smothering them with his body. He even peed on one particularly-difficult blaze.

The bomber finally made England and landed at the first emergency airfield available. It was a wreck, with its center portion completely burned away, leaving only the main beams. A few minutes after landing, the plane, which had been held together in part by balanced aerodynamic forces while in flight, collapsed under its own weight. It had over 3500 bullet holes in its carcass.

News of Snuffy's heroism electrified his colleagues, and the top brass. Such heroism was what the Medal of Honor was all about, and he was going to become the first living airman, and the first airman in the ETO, to receive the MoH. Secretary of War Henry Stimson would present the award personally, another first.

True to form, Snuffy had gotten into trouble after his amazing flight. His compatriots already didn't like him, and envied the attention he was receiving. On the day Stimson was to present the MoH, Smith was nowhere to be seen. He hadn't been told Stimson was coming with the MoH, and was serving disciplinary KP duty at the appointed time. A hurried search found him, and the ceremony proceeded. Smith's story, and the embarrassing snafu with Stimson, was duly reported in *Stars and Stripes*, causing consternation all around, except to those who knew him.

Smith flew four additional missions without incident, then was grounded for "operational exhaustion," busted in rank to private, and assigned a clerical job. He never flew again.

His deeds, and his comics nickname, made him famous back home. Fellow airman Andy Rooney (yes, the *60 Minutes* guy) wrote, "no one in the 306th was more surprised that Snuffy Smith had become a hero to the (Army) Air Force and a household name back in America than the disheveled little man himself."

That a living MoH awardee could be demoted was hard for anyone to comprehend, but there it was. Snuffy died on May 11, 1984, and was buried at Arlington.

Maynard “Snuffy” Smith References

<https://www.malmstrom.af.mil/News/Features/Display/Article/349726/legend-of-airman-snuffy-the-maynard-smith-story>

<https://homeofheroes.com/heroes-stories/world-war-ii/maynard-h-smith>

<https://www.mightyeighth.org/medal-of-honor-ssg-maynard-snuffy-smith>

<https://www.warhistoryonline.com/instant-articles/he-was-awarded-the-medal-of-honor-and-then-demoted-m.html>

Smiths MoH citation: <https://www.arlingtoncemetery.mil/Explore/Notable-Graves/Medal-of-Honor-Recipients/World-War-II-MoH-recipients/Maynard-Smith>

Barney Google and Snuffy Smith, comics stars (in song and movies, too):

https://en.wikipedia.org/wiki/Barney_Google_and_Snuffy_Smith (How many of you are humming “Barney Google, with the Goo, Goo, Googly Eyes” right now?)

The *USS Tang* Rescues 22 Airmen off Truk

The keel of the *USS Tang* (SS-306), a Balao-class submarine, was laid down at Mare Island Naval Shipyard on January 15, 1943. She was launched on August 27, fitted out, and commissioned on November 30. She would make five patrols, all under her only skipper, LtCdr Richard Hetherington O’Kane.

O’Kane was the son of a professor at the University of New Hampshire (Durham, NH) and grew up in a nautically-oriented area. He had a fondness for all things relating to ships and sea, and a knack for engines, motors, and other items useful on boats of all description. He graduated from the Naval Academy in 1934, and served stints on the cruiser *Chester* and destroyer *Pruitt* before moving over to submarines in 1938. His first assignment was the lumbering *USS Argonaut*, and he was aboard her, off Midway Island, when War broke out. The skipper was a dud, but perhaps that was a good thing. The *Argonaut* would have been an easy victory for the destroyers they dodged, and O’Kane had several fellow officers that were very successful later in the War and after (e.g. [William Post](#) and [“Pete” Gallatin](#)). O’Kane then transferred to the *USS Wahoo*, then commanded by Marvin Kennedy, with the soon-to-be legendary [Mush Morton](#) as XO. Kennedy was an expert at training his crew to a very high level of competence, but suffered from his pre-War training that placed undue emphasis on caution in tactics. The *Wahoo* sailed competently, but ineffectively. Then Kennedy was out, and Morton was in. Great choice!

Morton was pretty lax on Naval conformity, but a real tiger when it came to leading a sub into battle. He and O’Kane were sympatico in that regard, and the results showed it. Morton was one of the few skippers of that era that preferred to draw tactical information from periscope, sonar, and torpedo data computer, and gave O’Kane the plum task of manning the periscope

during attacks. O’Kane could do complicated trigonometric calculations in his sleep, a skill quite valuable in those days, when torpedoes did not work well and had no post-firing guidance capability. The skipper had to contrive a situation where the torpedo and target would occupy the same place at the same time, and fire from a range too close for the enemy ship to evade.

O’Kane served five patrols in *Wahoo*. The demands of a rapidly-expanding submarine force required rapid promotions, and O’Kane was brought back to Mare Island to finish and commission the *USS Tang* (SS-306). He was a fighter first and foremost, and made several moves that made *Tang* particularly effective, such as swiping a few scarce hams from the mess to bribe the construction crew to install special neoprene gaskets in one set of ballast tanks so they could be used as extra fuel tanks early in the patrol, and buying a metronome to help his sonarman get a “turn count” on the propeller of a target to help determine its speed. Unlike Morton, he would man the periscope.

After commissioning, he really buckled down during the shakedown period. He illegally patrolled off the Mexican coast, which would have caused a serious diplomatic incident had he been caught, figuring (correctly) that if he couldn’t approach Mexico without being detected, he would have no business fighting off the coast of Japan. He also performed a series of slow dives well below the test depth of *Tang* (450 feet), to see how far down his sub could really go. He knew that various fittings would give way to the sea pressure well before the hull imploded, and he was able to make a number of modifications that allowed him to maneuver safely at the limit of his depth gauge (625 feet). Needless to say, this sort of thing terrified some of his crew, and several put in for transfer. Here O’Kane found a very good ally, Murray Frazee, his very tough executive officer, who vigorously denied any thought of transfer. The crew was as scared of Fraz as they were of O’Kane!

Tang’s first patrol netted a few ships, a small portent of things to come. His third, fourth, and fifth patrols were real barn-burners, the latter two would win him one of the seven Medals of Honor awarded to submariners during the War (three of the seven were posthumous).

But it’s *Tang’s* second patrol that is the focus of his story here. U.S. carrier forces were going to lay on a big strike against the main Japanese naval base at Truk Atoll, a heavily-defended target. To increase morale and efficiency of the attacking pilots, his submarine was assigned to serve as “life guard,” picking up downed aviators before they could be captured by the Japanese.

O’Kane would have preferred to be sinking ships, but he recognized the contribution to the War effort life-guarding represented, and he approached that task with the same tenacity he did all others. He carefully planned his mission, used his deck gun to suppress interference from shore, and ending up rescuing a total of 22 flyers. His crew performed magnificently, and as he accumulated airmen, he assigned them to the radio shack, where they could guide damaged aircraft to *Tang’s* location (the downed flyers knew all the call signs and could identify most of the May Day calls by voice). One of the rescued men was a flight leader of considerable rank, and a strict by-the-book attitude.

O’Kane was helped greatly in the rescues by the skill and bravery of John Burns, a pilot of a Kingfisher float plane from the battleship *North Carolina* in the attacking fleet. Another *North*

Carolina Kingfisher had actually landed in Truk Lagoon to rescue a downed airman, but rough seas had wrecked the Kingfisher. Burns flew his Kingfisher to the rescue, picking up the downed pilot and the other Kingfisher's two-man crew, then, too heavy to take off again, taxied them out to the waiting *Tang*. Burns then flew off to search for other downed airmen. He spotted a life raft with one aboard, landed, and picked up the downed airman, who had to sit in Burns' gunner's lap. Burns continued his search by taxiing around the area (it would have been difficult to take off with three aboard). He found another raft with three men, and loaded them on his plane's wings. During the two-hour taxiing out to the *Tang*, he found another three-man raft, and had them tie their raft to his plane's pontoon. Rough seas required those three to join the other three hanging on Burns' Kingfisher's wings and fuselage, greatly slowing the Kingfisher's progress. An additional six hours of taxiing were required to reach the *Tang* and safety. By then, the Kingfisher was almost out of gas, and its pontoon was damaged, and *Tang* had no way of saving it. Burns seemed to enjoy sinking his damaged mount at the end of his heroic rescues. He had personally saved 10 aviators.

As night approached, O'Kane knew he would need help finding the last few downed planes. One of the flyers piped up with the knowledge that one of the attacking carriers had a squadron of night fighters well-suited for that purpose. O'Kane rang up the carrier skipper directly, angering the flight leader (who thought he should have been in the request loop) but getting three night fighters rather than the two he asked for. They ended up rescuing all of the aviators that survived the loss of their planes.

The pilots were jubilant. The life-guard program had never been so successful. The stick-in-the-mud commander asked O'Kane to immediately return the pilots to their home ships rather than take them to Hawaii. O'Kane was aghast, believing that after suffering the trauma of being shot down and rescued from under the noses of the enemy that they rated survivor's leave at the famed Royal Hawaiian hotel. He had his radioman report the rescues to the carrier commander, and made sure that the antenna lead somehow fell out of the radio when the radioman made the request to return the flyers. Off to Hawaii they went. The rescue made headlines everywhere, including a now-famous picture of O'Kane standing on the *Tang's* bridge, surrounded by the 22 men he saved.

The date of this magnificent event was **May 1, 1944**.

As mentioned previously, O'Kane's next three patrols were spectacularly successful. Until the very last torpedo of the fifth patrol was fired. It malfunctioned, causing the torpedo to run in a tight circle. O'Kane, on the bridge, quickly ordered emergency speed and a series of rudder movements trying to fish-tail his stern out of the way, but to no avail. The torpedo struck aft, at the bulkhead between the after torpedo room and the maneuvering room, causing the *Tang* to sink quickly by (what was left of) the stern. They were in ~180 feet of water, so *Tang's* steeply-inclined bow remained above water. *Tang* had been on the surface, and O'Kane and the bridge crew were swept into the sea. Those surviving below knew that the bow would be a target for the approaching escort ships from the convey *Tang* had just decimated, so they deliberately sank her, with the hope of using the escape hatch in the forward torpedo room. A few did

manage to escape that way, but the rest of the crew who weren't killed immediately by the explosion died. O'Kane and eight others survived to become POWs.

There is always a dispute over how many ships and how much aggregate tonnage were sunk by individual subs. *Tang* was [number one in both categories](#). *Tang* was one of only two subs to be awarded two coveted Presidential Unit Citations. O'Kane received the Medal of Honor, the Navy Cross with two Gold Stars in lieu of additional Navy Crosses, the Silver Star, also with two Gold Stars in lieu of two additional Silver Stars, the Legion of Merit with Combat Valor Device, the Purple Heart, and many other honors.

USS Tang Airmen Rescue References

The *USS Tang* (SS-306) at Truk: <https://www.history.navy.mil/research/histories/ship-histories/danfs/t/tang-i.html>

The Vought OS2U Kingfisher float plane:

https://military.wikia.org/wiki/Vought_OS2U_Kingfisher (it has a picture of Burns' Kingfisher with rescued pilots on its wings)

John Burns, Kingfisher pilot: <https://portcitysigns.com/community/kingfisher-seaplane-uss-north-carolina>

The *Tang* memorial at Pearl Harbor: <https://www.hmdb.org/m.asp?m=81473>

Richard H. O'Kane at Arlington Cemetery: <http://www.arlingtoncemetery.net/rokane.htm>

O'Kane's MoH citation: <https://militaryhallofhonor.com/honoree-record.php?id=84>

O'Kane, Richard H., *Clear the Bridge*, 1977, Rand McNally, ISBN 0-528-81058-8,

DeRose, James, *Unrestricted Warfare*, 2000, Wiley and Sons, ISBN 0-471-38495-X

Tuohy, William, *The Bravest Man: Richard H. O'Kane and the Amazing Submarine Adventures of the USS Tang*, 2006, Presidio Press, ISBN-13: 978-0891418894

[Personal note: Admiral O'Kane wrote two books about his wartime exploits. I had a copy of the first, *Clear the Bridge*, and the second, about his time on the *Wahoo*, was coming out at the same time I was finishing graduate school. My (then) wife surprised me by sending my copy to the Admiral, asking him to endorse it to me as a graduation present. O'Kane did her one better. He kept my copy, and substituted it with one he endorsed, *and* that bore the signatures of six of the then-living seven of *Tang's* survivors. He also sent me his new book, about his time on *Wahoo*, also warmly endorsed. They are prominently displayed in my home. I have a tear in my eye as I type this.

After grad school, I took a post-Doc position at the Lunar and Planetary Institute, next to Johnson Space Center. A person I met there knew of my interest in WWII submarines, and hosted a lunch for me and Admiral O'Kane's son, then an engineer at JSC. It was a wonderful time. The Admiral didn't share much about his WWII exploits with his family, especially his time

as a POW, so I spent much of the time at lunch regaling his son with war stories about his heroic Dad. He was quite amazed, and very proud. A fond memory, indeed!]

Francis Gary Powers and the U-2

In last week's Air and Space this Week, I wrote about the value of the High Ground (see [here](#)). The need for access to the High Ground for reconnaissance purposes was never higher than it was during the Cold War.

The U.S. was shocked when the USSR detonated their first atomic bomb on August 29, 1949, and even more so when they detonated their first hydrogen bomb on November 22, 1955. Learning what the Russians were up to became of paramount importance. But how could we obtain meaningful reconnaissance data? This was before satellites existed, and flying a high-altitude reconnaissance aircraft over the Soviet interior was not feasible.

We tried several ideas, including taking a page from the Japanese WWII balloon bomb program (see [here](#)). We tried putting high-altitude balloons up to float over Russia, some carrying cameras, some carrying microphones (to detect atmospheric bomb tests), but the data returned had limited value, since we could not control where the winds actually took the balloons. Their testing program did create a lucrative cottage industry in Roswell, NM, however!

The next step in the reconnaissance effort was to build an aircraft that could overfly the USSR at a height unreachable by defensive aircraft or ground-based weapons. That aircraft was the U-2, aka the "Dragon Lady." Imagine a sailplane (not "glider") with a big jet engine inside. Lockheed proposed the aircraft in 1953, and the first prototype flew in 1955. It flew at heights above 70,000 feet, and became operational in mid-1956, operated by the CIA. It carried the most sophisticated cameras we could build at the time, capable of seeing rather small objects from its operational ceiling. The CIA was convinced that the U-2 was untouchable by the Soviets, and the plane was equipped with self-destruct explosives that would destroy key components of the plane and its imaging systems should one go down. The pilot was expected to commit suicide to avoid capture.

The US and USSR were scheduled to have a summit meeting on May 16, 1960, with President Eisenhower, Premier Nikita Khrushchev, and the leaders of Great Britain and France, all nuclear countries, participating. Topics were the status of Berlin and nuclear arms control.

On **May 1**, 1960, a U-2 piloted by Francis Gary Powers was shot down over Russia by the new [SA-2 "Guideline"](#) two-stage anti-aircraft missile. He had taken off from a base in Pakistan, and his was the first attempt to overfly Russia proper. Fourteen SA-2s were launched at him, and two hit targets, but one was a MiG-19 interceptor, whose pilot, Sergei Safronov, ejected but died of injuries incurred. Another interceptor was ordered to ram the U-2, but his plane (a Su-9), while being much faster than the U-2 was difficult to maneuver at such high altitude. The other hit knocked Powers out of the sky.

Powers did not commit suicide, and the self-destruct mechanisms did not work. Powers was quickly captured (no point in radioing a "May Day" call here, it would only have attracted

Russian attention more), and the presence of sophisticated cameras clearly indicated Powers was on a reconnaissance mission. It didn't help that the film magazines held pictures of a number of military targets. We made a lame attempt to claim that the U-2 was a weather plane gone awry, but it produced only laughter.

The summit meeting broke up, with Khrushchev launching a (somewhat justified) tirade against Eisenhower's duplicity and the U.S. in general. It was the worst incident in the eight-year Eisenhower presidency.

Powers was interrogated heavily during captivity. The American press initially built a glowing picture of Powers as an "All-American Boy." Powers eventually admitted he was on a reconnaissance mission and apologized to the Russian. Then the press turned on him. Powers tried valiantly to only reveal the information that the Russians would already know from analysis of his plane's wreckage. Powers was tried and convicted of espionage. He kept a diary of his experiences while imprisoned.

Meanwhile, the FBI had captured a Russian spy, KGB Colonel William Fisher (aka Rudolf Abel), who had been captured by chance in the "[Hollow Nickel Affair](#)" (sounds like a *Man from U.N.C.L.E.* [episode](#) title). A possible prisoner exchange was discussed, but some in the CIA believed that Powers was not shot down, but rather defected. They didn't want him back, figuring he had spilled his guts, while Fisher had not (and therefore still had intelligence value).

Powers' wife was struggling in life prior to the U-2 shoot-down, and much more so after, and some were afraid that if Powers heard of her plight, he might be desperate enough to tell the Russians everything he knew in order to get home to help her. President Kennedy approved the exchange, and on February 10, 1962, Powers and U.S. student [Frederic Pryor](#) were swapped for Colonel Fisher. Powers smuggled his diary out in a rolled blanket.

Powers' return did not help his wife, who continued drinking heavily and "carousing." She got busted for DWI on June 22, 1961, and the CIA had her committed to a psychiatric institution to avoid bad publicity for a very-public CIA operative. The Powers separated in 1962, and divorced in January, 1963. He later married Sue Downy, whom he had met at CIA HQ. They had a very happy marriage, and had a son together, Francis Gary Powers, Jr. Both wife and son worked diligently to preserve FGP's image long after his death.

Powers worked for Lockheed as a test pilot throughout most of the 1960s, but was fired when he and a co-writer published a book about the U-2 incident, "[Operation Overflight](#)." After that, he became a helicopter traffic reporting pilot, first for KGIL radio in LA, then KNBC News. On August 1, 1977, his helicopter ran out of fuel and crashed, killing him and his cameraman, George Spears. He had successfully initiated an auto-rotation descent, but maneuvered near the ground to avoid a playground full of children, compromising his attempt to make an emergency landing.

Powers, an Air Force veteran, was buried at Arlington Cemetery. His son founded the [Cold War Museum](#) in 1996, showcasing many artifacts from his father's career and imprisonment. Some of the artifacts made it over to the [International Spy Museum](#), and still others were on display

at the National Air and Space Museum's now-defunct "Looking at Earth" gallery. NASM still has them, see: <https://airandspace.si.edu> and use the search function on "Francis Gary Powers."

CODA: Lockheed built a civilian version of the U-2, called the [ER-2](#). It was half again the size of the Dragon Lady. NASA had one, used for high-altitude aeronautical and other research. It was stationed at Moffett Naval Air Station (the military half of the facility shared by NASA's Ames Research Center, back in the day), when I was working at Ames (1982-3). Its flight schedule was sporadic, and not publicized in advance. But I had a buddy over in the ER-2's hangar, and he'd call me when the ER-2 was being prepared for flight. I'd have just enough time to climb the 100' ladder to the top of Building 242 to see the take off. It was always an amazing thing. The ER-2, like the U-2 and a sailplane, had a centerline landing gear. For take-off, little drop-able wheels were affixed to the wingtips. Its engine was loud, loud, loud! It would start its take-off roll, lift its nose, the comical wing wheels would drop off, and to keep public complaints down, the ER-2 would climb out of sight at a 70-plus degree angle of attack. One time, I was driving down US 101 just outside Ames when the ER-2 came over to land, very low and very slow. Traffic, while heavy, came almost to a standstill as drivers were astonished at the spectacle. The ER-2 had a low landing speed, but it was enough to keep its wings level for a long landing runout; by the time its speed was too low for it to stay upright, it would gently dip a wing to the tarmac, incurring minimal damage.

Additional Francis Gary Powers References

Wikipedia: https://en.wikipedia.org/wiki/Francis_Gary_Powers

The death of FGP: http://www.check-six.com/Crash_Sites/Powers-N4TV.htm and https://en.wikipedia.org/wiki/1977_Encino_helicopter_crash

Francis Gary Powers, Arlington Cemetery: <http://www.arlingtoncemetery.net/francisg.htm>

Last Edited on 26 April 2021