America, the "civilian commercial airline" that was actually a cover for CIA transport operations in Southeast Asia.

As the bullets and rockets began flying, a Thai mercenary hired by the CIA to guard the site ran out and opened fire with his AK-47. He emptied the 27 rounds of his clip into the nearest Antonov, which plummeted to the ground and burst into flames. The other two Antonovs, startled by the unexpected response from the ground, wheeled around and fled. At that moment, Captain Tom Moore of Air America was delivering ammunition to the station in his Huey helicopter. The scene was absurd: two biplanes fleeing from the wrath of a crazed Kalashnikov-wielding man while a third burned on the ground. "It looked like World War I," he later admitted.

Moore and his mechanic, Glenn Woods, quickly gave chase in their unarmed Huey. To their surprise, they discovered that the helicopter was faster than the planes! They flew above the closest plane, using the powerful downwash of the chopper's blades to make it stall and begin dropping. Woods climbed out onto the helicopter's skid and, holding onto the helicopter with one hand while operating his AK-47 with the other, sprayed the Antonov's cockpit with bullets.

By the end of the 20 minute chase, the second biplane had crashed while the third fled to safety. This incident marked the only victory of a helicopter over a fixed-wing aircraft, as well as the only air-to-air kill scored by the CIA.

Dov Levy



Artist's rendition of the attack that brought down the second Antonov An-2.

The Birth Of Topgun

The World's Premier Fighter Pilot Training School

When Soviet fighter pilots strikingly outperformed their American counterparts during the first phase of the Vietnam War, officials in the Pentagon were stunned. They took drastic measures to turn things around, leading to the creation of the world's foremost training school for fighter pilots in the nearly forgotten techniques of aerial dogfighting. This is the story of Topgun, the fighter training school that grew from unlikely beginnings into an organization that produces some of the world's best fighter aces.

Something was clearly wrong. Heads shook in the Pentagon as the top brass tried to make sense of it. The situation was so bad that President Lyndon Johnson had just called off Operation Rolling Thunder, the four-year US air offensive in North

Vietnam. They had gone in with the bestequipped forces and were fighting against a severely under-equipped enemy supplied with aging Soviet weaponry. It should have been a completely one-sided affair. This was especially true in the air, where the American military fielded its newest and best jet fighters. US pilots should have trounced their opponents.

They didn't.

The operation was originally intended to last just eight weeks. It would serve as a tour-de-force, shocking the North Vietnamese with an overwhelming display of US military might and forcing them to the bargaining table.

Things did not work out as planned. The expected swift and lopsided bombing campaign quickly escalated into a tenacious battle.

The Air Force's Best Showing: Operation Bolo

In the heat of Operation Rolling Thunder, the US military faced a potentially disastrous threat. The Air Force's brand new, supposedly unstoppable F-105 Thunderchiefs—highly sophisticated, supersonic aircraft—were getting knocked out of the sky with ease by largely obsolescent Soviet-built airplanes.

Early on, the Air Force discovered that its highly vaunted supersonic bomber was vulnerable not only to the fast new MiG-21 fleet of the North Vietnamese Air Force but even to the aging MiG-17s. The MiGs would swoop down suddenly on the bombers, who were at a disadvantage due to their bomb load. These planes carried out the bulk of the attack and bombing missions in the North Vietnamese interior. After knocking a few Thunderchiefs out of the sky and forcing the others to jettison their bombs prematurely, the MiGs would disappear again.

Maddeningly, America's powerful F-4 Phantom fighter jets were unable even to escort the Thunderchiefs all the way to their targets because of the danger from radarguided surface-to-air missiles, or SAMs. (While the Thunderchiefs were protected against the SAMs by radar jamming pods, there weren't enough pods to outfit the F-4s as well.) The Soviets were aware of this, and they readily took on the Thunderchiefs once their Phantom escorts were at a safe distance.



A MiG-17 chases a Thunderchief over Vietnam.

The fighter escorts suffered dearly as well. Operation Rolling Thunder cost the US nearly 1,000 aircraft (many lost to antiaircraft fire and SAMs) and carried a price tag of \$900 million—three times the damage it inflicted on North Vietnam!

Colonel Robin Olds, commander of the USAF 8th Fighter Wing, came up with a solution that helped make him a living legend. Already a storied World War II ace with 12 *Luftwaffe* kills to his name, he realized that the highly predictable flight patterns used by the Thunderchiefs made it easy for the enemy to pick them out on radar screens from miles away. Olds arranged for a group of Phantoms to simulate the formation, altitude, flight path, airspeed and even the call signs and radios signals used by Thunderchiefs.

On January 2, 1967, Olds led his fighter jets right over the base of the 16-plane MiG-21 squadron. Sure enough, the MiGs popped out of the clouds in a carefully coordinated attack meant to hit the Thunderchiefs simultaneously from front and rear... except that they weren't Thunderchiefs. By the time the MiG pilots realized who they were facing, it was too late for them to disengage.

An avid dogfighter, Olds had always encouraged the pilots under his command to sharpen their maneuvering skills, something that was not emphasized in the "new" high-tech Air Force that relied more on sophisticated technology than on human instinct. That experience was put to good use now as the American pilots attacked their nimble enemies with gusto. The next 15 minutes saw the most intense aerial combat of the entire war. Olds describes part of his experience:

A third enemy plane appeared at 10 o'clock, from the left to the right.... The first MiG zoomed away and I engaged the afterburner to get in attack position. I reared up my aircraft in a 45 degree angle, inside his turn. He was turning to the left, so I pulled the stick and barrelrolled to the right.

Thanks to this maneuver, I found myself above him, half upside down. I held

it until the MiG finished his turn, calculating the time so that, if I could keep on turning behind him, I would get on his tail, with a deflection angle of 20 degrees, at a distance of 1,500 yards. That was exactly what happened. He never saw me. Behind and lower than him, I could clearly see his silhouette against the sun when I launched two Sidewinders. One of them impacted and tore apart his right wing.

In just 13 minutes of that engagement, Olds and his fighters downed seven MiGs nearly half of the enemy squadron—without



Left: An F-105 Thunderchief is hit by a SAM. Right: Robin Olds in front of his F-4 Phantom, Scat 27, which he flew in Operation Bolo. His trademark moustache violated Air Force regulations and became part of the Olds legend.



Sequence showing a Sidewinder missile hitting a drone in 1957 during the missile's development by the US Navy at China Lake.



View from an F-105D Thunderchief as it shoots down a North Vietnamese MiG-17 with Vulcan 20-mm shells, June 1967.