

#### WHY DO I HEAR JET NOISE NEAR HILL AFB?

Hill Air Force Base operates one of the busiest airfields in the Air Force with approximately 45,000 operations annually. Various U.S. and international military aircraft transit the base for mission requirements, including depot maintenance with the Ogden Air Logistics Complex and participating in flying activity at the nearby Utah Test and Training Range. Hill's active duty 388th and Reserve 419th Fighter Wings execute the bulk of flight operations at Hill AFB as they train to remain combat ready with the F-35 Lightning II that are used to defend the United States and our allies. The 514th Flight Test Squadron at Hill AFB also routinely performs functional check flights on the F-35 Lightning II, F-22 Raptor, F-16 Fighting Falcon, C-130 Hercules and A-10 Thunderbolt to certify the aircraft are airworthy again after undergoing maintenance or overhaul at Ogden ALC.

#### WHERE DO THE F-35s AND OTHER AIRCRAFT FROM HILL AFB FLY?

The majority of the aircraft departing and arriving at Hill AFB, train in the air space of the UTTR, located in the western Utah desert. They also periodically conduct currency training and evaluations at Wendover Airfield and Salt Lake International Airport. This currency training is mandated by the Air Force to keep our pilots proficient.



#### WHAT ROLE DOES THE WEATHER PLAY IN TAKEOFFS AND LANDINGS? HOW DOES WEATHER IMPACT HOW JET NOISE IS HEARD?



Weather, including winds and cloud cover, affect flight operations at Hill and can change the various procedures and flying options for the local air traffic pattern. For example, when winds are above 10 knots, instead of taking off and landing to the south, Hill AFB flight operations shift to the north. Weather inversions with low cloud cover can also set up over the Hill AFB area, which trap and amplify the sounds created when aircraft operate near the base. Because of these conditions, local residents may hear sounds not typically produced by normal aircraft operations.



### WHAT IS THE BASE DOING TO MINIMIZE THE NOISE IMPACT ON SURROUNDING COMMUNITIES?

Hill AFB arrival and departure procedures are coordinated with the Federal Aviation Administration and are managed alongside Salt Lake International Airport arrival and departure procedures. To the maximum extent possible, Air Force pilots avoid flying over densely populated areas, schools, churches and public buildings. On departure, pilots climb to assigned altitudes as rapidly as possible to mitigate environmental noise effects.

#### WHEN DO THE JETS USE THEIR AFTERBURNERS?



Aircraft flying in the surrounding area are allowed to use afterburners only during takeoff and emergencies. Afterburners used on takeoff are generally extinguished by the time the aircraft reaches the end of the runway. If carrying heavyweight weapons, afterburners may be used a bit longer in order to gain safe operating airspeed.

#### HOW LOW ARE THE JETS ALLOWED TO FLY?

Hill's fighter wings comply with all Air Force and Federal Aviation Administration guidelines, including not flying lower than 500 feet at any time other than takeoff and landing, unless there is an emergency. The FAA controls the flight paths for the commercial air traffic landing at Salt Lake City International Airport by limiting the altitude of aircraft taking off from Hill AFB. Once a jet is clear of the commercial air traffic flight path, they gain altitude.



#### WHY DO I SEE AIRCRAFT FLYING AT NIGHT?



The active-duty 388th Fighter Wing and the Air Force Reserve 419th Fighter Wing are required to train at night to maintain their readiness and all-weather capabilities. The wings limit their night operations to what is required to remain proficient in night-flying training. During after-dark operations, the wings' personnel train with advanced targeting pods and night vision goggles. When deployed, the 388th and 419th provide close air support and must remain proficient in night flying to successfully accomplish their mission. When on a night schedule, flying is anticipated to be completed before midnight and residents will be notified.

#### WHY IS THE UTAH TEST AND TRAINING RANGE USED FOR TRAINING?

The UTTR is a major range and test facility that provides an ideal location for operational test and evaluation for weapons requiring a large safety footprint. The UTTR is also the only location capable of supporting overland testing of cruise missiles. The UTTR is used in a training capacity for air-to-air-combat, air-to-ground inert and live practice bombing and gunnery training by Department of Defense aircrews. The UTTR provides a vast area of realistic terrain for world-class test and training scenarios to ensure the war fighter is prepared to deploy at a moment's notice to win any conflict with decisive air and space power. This range is a national asset, critical to the readiness of the Air Force.

#### SOMETIMES NOISE INCREASES DURING EXERCISES AT THE BASE, WHY IS THAT?

When aircraft from other installations come to Hill to train, it often increases the number of takeoffs and departures. Many times, visiting aircraft have different noise profiles than Hill's aircraft, which can affect noise levels as well. Additionally, during an exercise there may be an increase in the total number of flights planned and executed in an effort to provide a more realistic combat training environment for air and ground crews.





#### HOW DO I FILE A NOISE OR OVER FLIGHT COMPLAINT? WHAT DOES THE AIR FORCE DO ABOUT COMPLAINTS?

Write down the time, date, location, direction of flight, how many aircraft and their description such as one or two tails, color, jet or propeller, etc. You may email this information to 75abw.pa@us.af.mil, or call the toll free noise complaint hotline at 877-885-9595. Hill Public Affairs officials log noise complaints into a database and review every complaint for anything out of the ordinary. The majority of the aircraft noise complaints come from areas where routine flying operations take place. If we are provided details of something out of the ordinary, the Air Force investigates each incident and, if it was a violation of directives, takes steps to prevent it from reoccurring.





### WHY ARE THERE BOOMS OCCURRING ALONG THE WASATCH FRONT?

There are a few reasons that booms can be caused by Air Force activities on the Utah Test and Training Range. In the special use airspace of the UTTR, our pilots can perform maneuvers to simulate combat conditions and these maneuvers could at times cause sonic booms. Munitions dropped by aircraft performing training on the range can also cause booms. With the right weather conditions, such as inversions or cloud cover, the noise from these sonic booms or munition drops can be amplified and travel some distance to populated areas of the Wasatch Front.

The UTTR also plays a key role in disposing of the nation's ballistic missile rocket motors, and the Air Force typically performs detonations at the UTTR two or three times a week between April and October each year. Detonation is the best environmental method of disposing of the rocket motors and propellant. To date, the Air Force has safely detonated more than a million pounds of missile motor propellant. Before each detonation, the Air Force takes atmospheric readings to check wind speed, direction and other factors that are entered into a sound model to determine if conditions are acceptable for a large detonation. Detonations are delayed if the conditions are determined to be unacceptable. Because of the viability of upper atmospheric weather conditions at certain times of the year, however, the sound model may not accurately predict sound levels along the Wasatch Front and booms can be heard.



#### **F-35A LIGHTNING II DEMONSTRATION TEAM**









The U.S. Air Force F-35A Lightning II Demonstration Team is operated by the 388th Fighter Wing at Hill. The team is typically on the road from March-October, performing across the country at more than 20 shows. During the season they may practice locally, above Hill AFB, once per week. The routine lasts approximately 15–30 minutes. In the offseason, November–February, they may practice more frequently. The team is required to have maintenance personnel and safety observers on the ground for each practice and demonstration. The pilot is also required to practice the routine over an airfield, similar to an air show. For these reasons, they cannot practice properly over the Utah Test and Training Range.

### VIDEO RESOURCES



FLYING OPERATIONS AT HILL AFB https://www.dvidshub.net/video/735025/f-35-flying-operations-hill



**NIGHT FLYING AND COMBAT EXERCISES** https://www.dvidshub.net/video/735029/f-35-night-operation-and-combatexercises-hill-afb



F-35s AND HILL AFB https://www.dvidshub.net/video/735040/f-35s-and-hill-afb



**F-35 DEMONSTRATION TEAM** https://www.dvidshub.net/video/741904/f-35-demonstration-team-andhill-afb