

# Busting Bravo

## A Lesson Learned by a CFI

*(Editor's Note: A reader who wanted to share his Class B learning experience related this story to the FAA Safety Briefing editorial staff)*

One showery morning in August 2012, a CFI was conducting a cross country flight, departing with his student from Honolulu International Airport. They were given the Shoreline Departure and told to resume their own navigation just before passing Diamond Head, a volcanic landmark to the southeast of the airport. Because they had filed Koko Head as one of their waypoints, they went direct to Koko Head. Before reaching that waypoint, they were told to squawk VFR. They did so and continued to fly towards and eventually directly over Koko Head.

At that point, the CFI set the 093 degree radial off Koko Head in Nav 1 (which had passed a check at a VOR test facility within 30 days). The 093 degree radial is also the V-15 airway and is displayed on the Hawaii VFR sectional as north of the Honolulu Class B airspace. They flew with a Nav 1 needle deflection within half a dot and continued until they approached the west shoreline of Molokai. They then proceeded direct to La'au point, and from there continued to their destination.

At home several hours later, the CFI was informed that they had violated the Class Bravo. You can imagine he found that to be quite a shock, as he thought he had done everything within the capability of his airplane to avoid the airspace. However, after spending time to reflect, he began to realize there was more he could have done.

His 1,500 hours of experience of flying in and around the Honolulu Class Bravo and his familiarity with VOR navigation proved insufficient to avoid a Class B violation on this particular day. He could (and should) have used both VORs available to him, and he could (and should) have chosen a Koko Head radial that was farther north (i.e., away from the further 2000-foot floor of the Class Bravo shelf). Tracking the 060 radial off of the Koko Head VOR would have given this flight a larger margin for protection from error. In addition, they had access to a VFR-only GPS with distance readouts they could have used for added situational awareness.

Another way to avoid this mistake would have involved requesting flight-following with air traffic

control. In this situation, ATC had told them, "You are leaving Class Bravo airspace, squawk VFR, frequency change approved." If they had stayed with the controller, they definitely would not have reentered Class Bravo without permission since they would have been coordinating their navigation with the controller. At the very least, they should have continued to monitor the frequency.

The CFI found out later that the controller had been trying to get their attention, and that they might have been able to avoid a violation simply by listening to the warnings. Instead, the CFI was busy with his student, trying to impress upon him the importance of opening the flight plan with flight service. They had been speaking with flight service instead of maintaining radio contact with departure control.

Prior to this event, the CFI always had heightened awareness in and around the HNL Class Bravo airspace. He was always very careful to avoid the shelves and very focused on violation avoidance. Now, of course, he is even more acutely aware of the safety implications of a Class Bravo airspace incursion, even if the incursion is "only" to clip one of its far corners. ATC was using the established airspace boundary to maintain aircraft separation. At the time of the incursion, traffic was inbound and they were expecting *all* VFR traffic to remain outside of the defined boundary. By entering the Bravo airspace, this wayward flight forced ATC to vector traffic around them to maintain legal and safe separation.

We tell this story because we are all human — accidents and incidents happen. This experience made the CFI a better pilot and, in turn, a better flight instructor. He had always emphasized the need for clearance into Bravo, the need for two-way radio communication, and the use of a mode C transponder with his students. This experience made him that much more dedicated. Using redundant systems and good cockpit resource management will help you avoid violating the regulations that are intended to keep all aviators safe and out of trouble. ✈️