

DON'T BE MISTAKEN FOR A HIJACKER

Anti-piracy system threatens hoodlums, not lawful hunters

By AMERICAN RIFLEMAN STAFF

LAST year and the year before, hijackers seized an alarming total of 46 U.S. passenger airliners, with Cuba the usual destination.

So far this year, the hijacking rate has dropped off sharply. Some credit for this may be due to electronic precautions taken to detect armed air pirates before they board planes. A three-step anti-hijacking system has been developed by the Federal Aviation Administration to screen airline passengers and deter hijacking.

Inevitably, this kind of precaution raises questions as to whether sportsmen, laden with hunting guns and knives, camp hatchets and similar gear, may not sometimes find themselves suspect of being hijackers. For this reason, THE AMERICAN RIFLEMAN undertook an extensive inquiry with the full cooperation of Federal officials. The finding:

Nothing to fear

To all indications, reputable gun owners, whether hunters, competitors or sportsmen in general, have nothing to fear from the Federal anti-hijacking measures as long as they follow a few simple rules. By doing so, they will avoid embarrassment and inadvertent violation of air travel regulations.

Although firearms have figured in the majority of U.S. airliner hijackings, the anti-hijacking device in most common use could cast suspicion on your hunting knife or hatchet just as readily as on a handgun.

Perhaps this is as it should be. Official figures indicate that while guns were drawn in 49 hijackings, knives were the principal weapon in 20, and bombs, real or alleged, figured in 13. (Also used: razors, a BB gun, a tear gas pen, a broken bottle.)

Under Federal law, no one but a law enforcement officer possessing a special FAA certificate may board an airliner with a firearm on his person. Nor may a passenger carry on his person a knife with a blade six inches or longer.

Violators are subject to a \$1000 fine

and a one-year jail sentence.

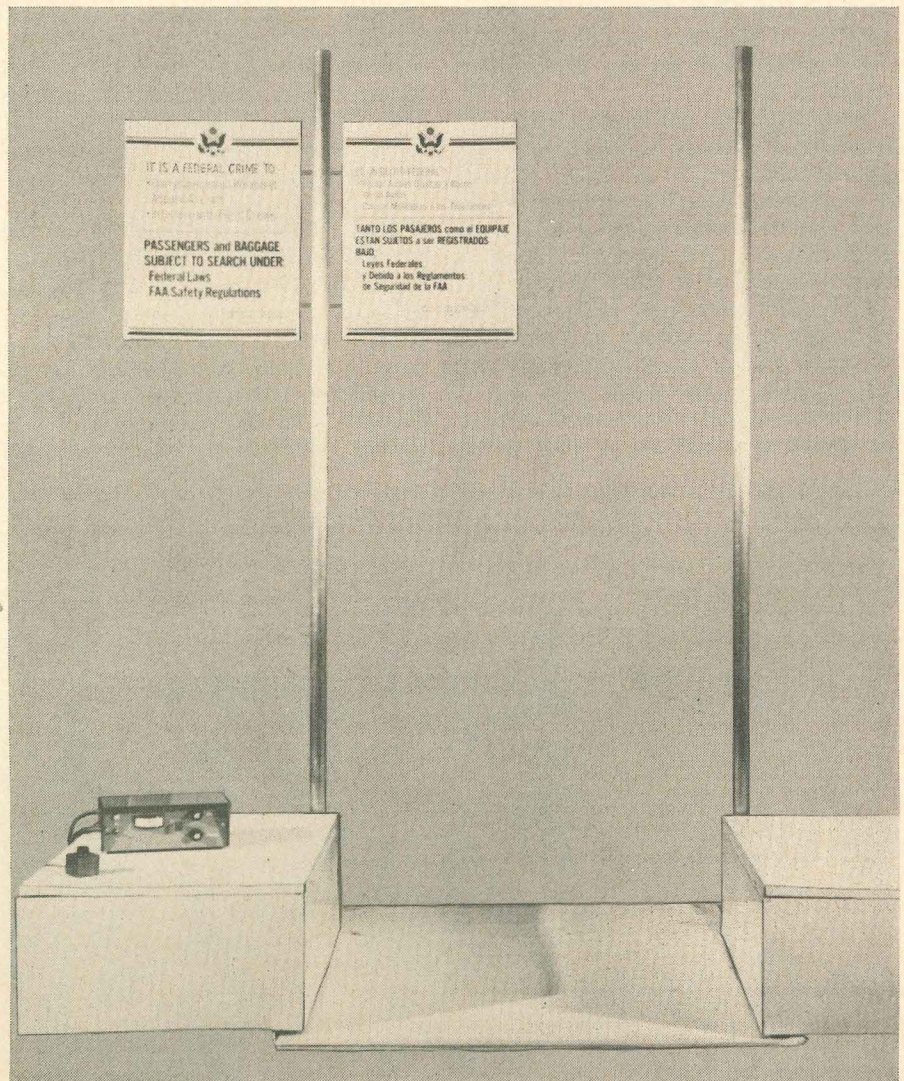
However, the air travelling gun owner is in complete compliance with the law if he: (1) presents his guns to the airline customer service people at the terminal for special handling en route; or (2) checks his cased guns with his other baggage and notifies the airline that he has guns in his baggage. In both instances, guns must be unloaded. Knives with blades six inches and longer, and hatchets should also be checked through as baggage.

Would-be hijackers and other airborne criminals, however, have far more reason to be alarmed than they ever did since plane hijacking began back in 1930 over, of all places, Peru. The next few occurred in the 1940's in Rumania, Czechoslovakia, Yugosla-

via, Poland, Greece and Ethiopia. Not until 1961 did hijacking first strike American airliners. With 13 successful air piracies of U.S. airliners in 1968 and 33 in 1969, the U.S. Government stepped in.

Direction of the Federal anti-hijacking campaign has been entrusted to a medical executive, H. L. Reighard, M.D., Deputy Federal Air Surgeon for the Federal Aviation Administration. Dr. Reighard, who is chairman of the FAA's Anti-Hijacking Task Force, and NRA Life Member James F. Rudolph, the FAA's Director of Flight Standards Service, who worked on the hijacking problem in its early stages, graciously cooperated with THE AMERICAN RIFLEMAN in the preparation of this report.

Dr. Reighard's task force began its



Detector employed to thwart the aspiring hijacker.

quest for a means of nailing arms toting passengers before they board an airliner about 21 months ago.

It quickly turned up 10 potentially useful equipment approaches to the problem. Collaborating with the U.S. Naval Ordnance Laboratory in Washington, D.C., it pushed ahead with one mechanism which showed special promise, an instrument called a magnetometer.

How it works

Now in use by three airlines, the magnetometer utilizes multiple sensors to measure the degree of disturbance caused by passage of metal objects through a magnetic field. The bigger the object and the faster it passes a sensor, the higher the disturbance reading produced on that particular sensor.

The magnetometer is placed inconspicuously at some point where an airline's passengers will pass through its magnetic field. Multiple sensors prevent an excessive number of false alarms. Thus, a passenger's wristwatch passing rapidly by one or more sensors might produce a high reading for those particular sensors. But when averaged out with the readings of all the sensors, it would not produce a high enough average reading to raise suspicions.

Obviously, the magnetometer alone is no surefire weapons detector, since it reacts to all metal indiscriminately. Some quite innocent metallic objects produce high readings, such as metal-lined brief, attache and camera cases and some kinds of photographic light meters. A hatchet might produce a high reading. So might the heavy metal jewelry favored by the "flower people."

Despite this flaw, the magnetometer is invaluable when used as it is intended, as one component of a three-part anti-hijacking system.

The second segment of the system has a science-fiction ring to it and a crime preventative potential considerably beyond its present application. To develop it, the FAA's Office of Aviation Medicine Staff Psychologist, Dr. John T. Dailey, together with Dr. Reighard and others, drew up a list of the behavioral traits of all known hijackers.

This information was screened, sifted, and molded. Out of it came a collective portrait of the characteristic hijacker—a "behavioral profile" of a particular species of hoodlum.

Traits popularly believed to be "criminal" or "suspicious"—nervousness, shifty eyes, sweaty palms—have no significance in the profile, Dr. Reighard emphasizes. Prevented by security requirements from revealing hijacker

traits, he illustrated the general nature of the profile by using a parallel.

Some years ago, to satisfy his curiosity, a psychologist studied the behavior of people entering a museum exhibit. Most, he found, turned right to enter the exhibit and departed for the next exhibit by the first door to the right.

A minority, however, did not conform to this exhibit viewing pattern, and in this sense they were abnormal. Similarly, hijackers display abnormal traits—shared by only 0.2% of the population—which can be easily spotted by a person trained to do so.

The "behavioral profile" has been so simplified that any airline customer service employee can apply it after brief instruction. But though the FAA is willing to instruct key personnel of an airline on a "need to know" basis, they limit knowledge of the profile to a few individuals within an organization as possible.

The magnetometer and the behavioral profile backstop one another, and their findings are interpreted in conjunction. A boarding passenger who produces a high metallic reading but who does not fit the hijacker behavioral profile is not stopped. Nor is a person who possesses hijacker behavioral traits unless he is also carrying a significant amount of metal.

When a boarding passenger matches the hijacker profile and is also carrying considerable metal on his person, the third element in the anti-hijacker net swings closed: A deputy U.S. Marshal politely but firmly detains the passenger for questioning and, possibly, searching.

The weapons detection system was first put into operation in October, 1969. At present it is in use on a limited basis (at some air terminals, on some, but not all flights) by Eastern Airlines, TWA, and Pan American. Eastern has indicated, however, that it plans to install the system in the near future for all its flights from all airports. Other airlines are expected to follow suit.

Results to date

So far, the system has netted no hijackers. But, coincidentally or not, hijackings have declined sharply since the three airlines started to use the system on a spot check basis.

And there is no lack of proof that the system does what it is intended to do—spot armed individuals before they board a plane. Within months of its debut, it fingered four armed narcotics runners and at least one man fleeing prosecution. It has also tripped up several other persons who, habitually and illegally, have been travelling armed

aboard air carriers.

The system has also proven its accuracy in retrospect. In February, an Eastern Airlines flight which had not been screened was hijacked to Havana. Ground personnel who had seen all passengers boarding were interviewed. By applying the behavioral profile to the descriptions, one passenger was marked as a potential hijacker. After the plane landed in Cuba, Eastern learned that its diagnosis was correct. Applied in the same retrospective fashion to a non-screened United aircraft pirated in March, the system again identified the pirate correctly.

The right of airlines to stop and search suspect passengers has the blessing of both the Justice Department and the American Civil Liberties Union. The ACLU even expressed the belief that the hijacking prevention program was sorely needed and of great benefit to the public.

Other efforts

As noted earlier, the system is not perfect. Some innocent persons toting harmless metal are grilled before boarding. To reduce inconvenience for the innocent the FAA is working on a device which it hopes will spot guns more accurately by "sniffing." If perfected, it will react to the chemical characteristics of gun oil, gunpowder solvents, residue of fired powder and bullet lubricant. The FAA also hopes that it will be able to detect explosives, both in hand and checked baggage.

The possibility of identifying arms by low-level X-ray is also being explored. FAA tests indicate that X-ray exposure needed to "picture" a firearm is less than the radiation of large buildings and other emanators to which many people are continually exposed.

In case pre-boarding checks somehow fail to nab an armed passenger, there are still other possible expedients. After an Eastern Airlines copilot was killed and a pilot badly wounded during a March hijacking, the FAA announced that it would urge airlines to install bullet-proof shields around the cockpits of their planes.

Hopefully, such shields will become less necessary as weapons detection systems come into wider use. Work continues in this area, and the FAA emphasizes that they are always open to new ideas.

By one means or another, the FAA intends to continue its anti-hijacking endeavors until the successful air pirate becomes as extinct as his seagoing counterpart who once terrorized the Spanish Main. ■