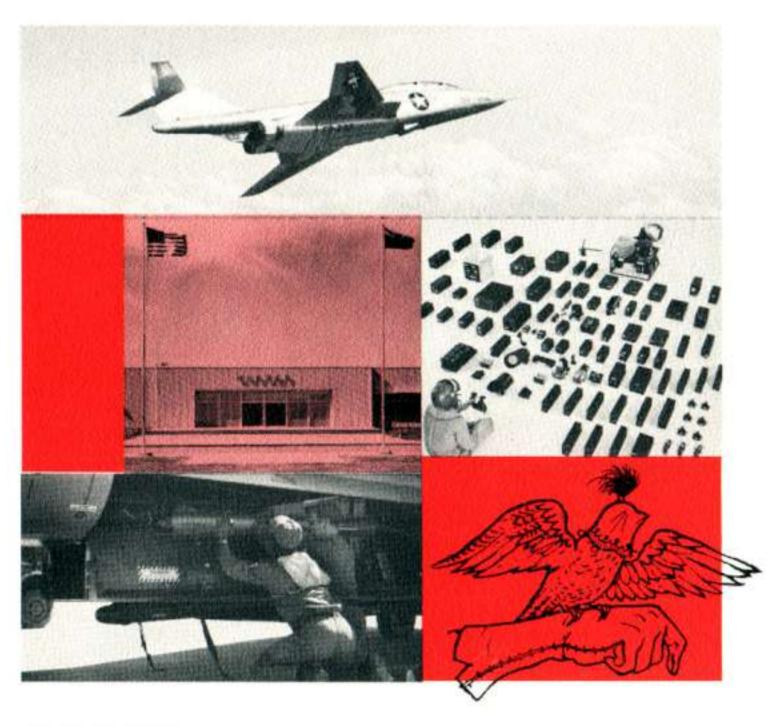
THIS IS THE FALCON





DEADLY BIRD... The FALCON is an air-to-air guided missile designed to be launched from interceptor aircraft to destroy enemy bombers.

The FALCON is aptly named. In the ancient sport of falconry, the falconer would, upon sighting the prey, release his hunting hawk—the falcon. Once on his own, the falcon would seek out the prey, outmaneuver it, strike it to the ground.

That is precisely what the FALCON guided missile does.

GAR-1D is the United States Air Force designation for the FALCON. It means "Guided Aircraft Rocket." With a length of six feet and a diameter slightly over six inches, the FALCON is the smallest of all guided missiles. And it weighs less than the average man.

WEAPON THAT "THINKS"... Exact performance figures are secret. However, since modern bombers fly at the speed of sound, it is obvious that the FALCON must be able to fly at considerably higher speeds to overtake and down its target. Like the medieval falcon, the GAR-1D is on its own as soon as it is released by the modern "falconer"—the interceptor aircraft. It finds its own way to the target. It outmaneuvers and destroys the enemy through the actions of its own sensing and guidance systems. No amount of skillful piloting on the part of the enemy can prevent his destruction.

The FALCON literally out-thinks the enemy.

It does this by constantly recomputing the target's direction of flight and steering a collision course to the predicted point of impact. The accuracy of the FALCON'S design was proved by the number of drone aircraft destroyed during developmental tests (see cover).

The FALCON'S effective range is measured in miles.



DESIGN FOR DEFENSE... The design of the FALCON is no less remarkable than its performance. It's a marvel of miniaturization. All guidance, control, and auxiliary systems are installed in a space no larger than a few feet of stovepipe. The equipment can also withstand temperature and vibration extremes far beyond the endurance of human beings or even conventional control equipment.

In the Convair F-102A and the Northrop F-89H Scorpion interceptors, the FALCON is used in conjunction with the Hughes Radar Armament Control System, which spots the target and launches the missile at the proper instant. On the Scorpion, the missiles are carried in and launched from wing-tip pods. The F-102A is equipped with special launchers in the fuselage.

The FALCON—developed in the Hughes Research and Development Laboratories at Culver City, California, and manufactured at the Tucson, Arizona, plant—is an extremely potent weapon in our Nation's defense armament and is fully operational today in squadrons of the Air Defense Command of the USAF.



For a dramatic presentation of the GAR-1D, see "This is the FAL-CON," a motion picture in sound and color. Produced by the Hughes Aircraft Company, this film shows actual scenes of the FALCON tracking and destroying aircraft. Available without charge for group showing. Write—



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HUGHES AIRCRAFT COMPANY
CULVER CITY, CALIFORNIA