Radioplane OQ-2A

Role	Target drone
National origin	United States
Manufacturer	Radioplane
First flight	1939
Primary user	USAAF
Number built	ca. 15,000

The **OQ-2 Radioplane** was the first mass-produced UAV or drone in the United States. The drone was the product of Reginald Denny. He served with the British Royal Flying Corps during World War I, and after the war immigrated to the United States to seek his fortunes in Hollywood as an actor. Denny had made a name for himself as an actor, and between acting jobs, he pursued his interest in radio control model aircraft in the 1930s. He and his business partners formed "Reginald Denny Industries" and opened a model plane shop in 1934 on Hollywood Boulevard known as "Reginald Denny Hobby Shops".

Development
The shop evolved into the "Radioplane Company". Denny believed that low-cost RC aircraft would be very useful for training anti-aircraft gunners, and in 1935 he demonstrated a prototype target drone, the **RP-1**, to the US Army. Denny then bought a design from Walter Righter in 1938 and began marketing it to hobbyists as the **Dennymite**, and demonstrated it to the Army as the **RP-2**, and after modifications as the **RP-3** and**RP-4** in 1939.

Army Acquisition
In 1940, the Army placed an order for 53 RP-4s, designating them the **OQ-1**, the *OQ* meaning a "subscale target". This small order led to a much bigger 1941 order from the US Army for the company's similar **RP-5**, which became the US Army **OQ-2**. The US Navy also bought the drone, designating it **TDD-1**, for *Target Drone Denny 1*. Thousands were built, manufactured in a plant at the Van Nuys Airport in the Los Angeles metropolitan area.

A Chance Encounter
In the summer of 1945, Captain Ronald Regan of the U.S. Army's 1st Motion Picture Unit ordered a Private, previously trained as a professional photographer, on a routine assignment for *YANK* magazine. David Conover, then 26, headed to Southern California's Radioplane Corporation, a company that built small remote-controlled aircraft used for antiaircraft practice. His job was to shoot morale-boosting photographs of pretty girls doing their job to help the war effort.

As Conover later wrote, "I moved down the assembly line, taking shots of the most attractive employees. None was especially out of the ordinary. I came to a pretty girl

putting on propellers and raised the camera to my eye. She had curly hair and her face was smudged with dirt. I snapped her picture and then walked on. Then I stopped, stunned. She was beautiful! I retraced my steps and introduced myself." He then asked for her name.

"'I'm Norma Jeane Dougherty.' She smiled and offered me her hand." She was later to become famous with another name—Marilyn Monroe.

Norma Jeane Dougherty, June 26, 1945.

Description and variants

The OQ-2 was a simple aircraft, powered by a two-cylinder two-cycle piston engine, providing 6 horsepower (4.5 kW) and driving two contra-rotating propellers. The RC control system was built by Bendix. Launching was by catapult only and recovered by parachute should it survive the target practice. The landing gear was used only on the OQ-2 versions as sold to the Army to cushion the landing by parachute. None of the drones including the improved variants shipped to the Navy had landing gear. The subsequent variants delivered to the Army did not have landing gear.

The OQ-2 led to a series of similar but improved variants, with the **OQ-3** / **TDD-2** and **OQ-14** / **TDD-3** produced in quantity. A number of other target drones were built by Radioplane (including licensed contractors) and competing companies during the war, most of which never got beyond prototype stage, which accounts for the gaps in the designation sequence between "OQ-3" and "OQ-14". After WW2 ended various experiment were done with Radioplane target drones. In one experiment in 1950 a derivative of the QQ-3 Radioplane drone was used to lay military communication wire.

During the war Radioplane manufactured nearly fifteen thousand drones. The company was bought by Northrop in 1952.

Specifications (OQ-2)

General characteristics

- **Crew:** None
- **Length:** 8 ft. 8 in (2.65 m)
- **Wingspan:** 12 ft. 3 in (3.73 m)
- **Gross weight:** 104 lb. (47 kg)
- **Power plant:** 1 × Righter O-15-1, 7 hp (5 kW)

Performance

- **Maximum speed:** 85 mph (137 km/h)
- **Endurance:** 1 hours 0 min