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# They Made It — W5OPC/Double Eagle II

It was no simple accomplishment. Moving majestically over the cloud-covered coast of France, three adventurers in their helium-filled balloon had overcome many technical problems, discomfort, exhaustion and danger since leaving Presque Isle, ME, less than six days earlier. All of this was traded off for exhilaration and fame when they finished their transatlantic trip by landing in a wheat field some 50 miles west of Paris.

When the *Double Eagle* was launched in September 1977, Massachusetts-area hams tracked the balloon until it was forced down near Iceland.<sup>1</sup> Hams also had a big part in this second attempt. "Doc" Wiley, W5OPC, flight director; Sydney Parks, WA5KGQ, communications director; and Dr. Richard Schwoebel, WB5OJO, technical director, all played key roles in planning the project. This wasn't the first time W5OPC had been connected with something transoceanic: Back in 1949, Doc was at one end of the first two-way Amateur Radio transoceanic radioteletype QSO.<sup>2</sup>

Amateur Radio on board *Double Eagle II* was planned to be used only as a backup for the commercial frequencies and equipment on the craft, to be employed only when absolutely necessary . . . in cases of emergency or where the safety of the mission was in jeopardy. As in the ham tradition of the past, Amateur Radio came through when all else failed. Crystal-controlled sideband gear on commercial frequencies malfunctioned (it turned out to be a bum piece of coax and a connector problem) so that important position, navigational and safety information couldn't be passed while the craft was in international territory over the open sea. So what does one do at 25,000 feet when regular communications fail?



The *Double Eagle II* gently but triumphantly floats over the French coast. (photo courtesy of Newsweek/Elaine Sciolino)

Up came W5OPC on 20 meters with important traffic. As is usual with ham operations in this kind of emergency situation, cooperation and circuit discipline on the frequency (around 14.301 MHz) was voluntarily maintained with several W8s, 4s, 3s, 2s and a 1 being worked to pass the necessary traffic, air traffic-control clearances and transponder codes.

The accompanying photos show the *Double Eagle II*'s communications center which was mounted in the craft's gondola. At the far left inside the wooden enclosure is the vlf navigation receiver and

on its right are two homing beacons at 1677 kHz. The black object outside the enclosure on the right is the ship's compass. The large enclosure on the right contains, at the top left, an Atlas ssb transceiver with its output meter showing to its right. Below it is the antenna switching patch-panel and under it is a marine vhf transceiver. Moving right, the two identical, stacked boxes are two 10-watt ssb transceivers operating in the 5- to 8-MHz commercial bands. At the far right from top to bottom are two 360-channel vhf aircraft transceivers for air-to-air and air-to-ground communications. Below them is a radar transponder to interact with air traffic-control radar stations. Below this is a speaker mounted behind a perforated grill. Not visible but mounted below decks in a sealed container are two transmitters to provide periodic position reports and a coded emergency reporting capability via the Nimbus 6 satellite. Vhf aircraft, vhf marine and satellite antennas were mounted on the gondola itself. Trailing wire antenna reels were located at the rear corners of the gondola to be used for hf communications and the homing beacon. A 20-meter vertical dipole was rigged to halyards high up on the side of the balloon. Power for the ham rig was supplied by automobile storage batteries. The other commercial gear power came from alkaline batteries. The gondola is actually a fairly seaworthy catamaran which could have been rigged for sailing should a water landing have become necessary.

Those lucky enough to contact the airship will receive a special QSL.

Congratulations, *Double Eagle II*, for what you have done. — WICUT

#### Footnotes

<sup>1</sup>Stray, *QST*, January 1978, p. 32.

<sup>2</sup>*QST*, May 1949, p. 40; July 1949, p. 40.

Excitement builds as preparations for the launch continue. Flight Director "Doc" Wiley, W5OPC (left), and Communications Director Sydney Parks, WA5KGQ, pose here with the communications equipment in the gondola. At right is another view of the gear (see text).

