A boundary layer control system, which will spectacularly shorten the already astonishingly brief take-off and landing runs of Lockheed's versatile 61-ton C-130 Hercules transport, is now in an advanced stage of development and flight test.

The Lockheed BLC system culminates many years of study by Lockheed engineers and follows four years of research devoted to specific application of the system to the Hercules.

Four auxiliary jet engines, weighing only 500 pounds each, will furnish the streams of high pressure air which flow over all control surfaces. The BLC jet engines are each connected to a central system providing air evenly to all surfaces even with one engine out.

Manufacturing work on the BLC Hercules can begin now because 80% of the airplane is identical to the C-130 B. In Europe, a nation or group of nations could manufacture the C-130 B and have a European version flying in less than half the time required by a new untested design. The program could then be phased into the more advanced BLC Hercules. Know-how acquired by Lockheed in manufacturing nearly 300 C-130s to date can make the BLC Hercules European manufacturing project the most rapid and inexpensive answer to the needs of European nations for a high performance, all-purpose transport.

As a combat transport of men and equipment the C-130 showed its superlative value in airlifts to Lebanon and Turkey.