

MEMORANDUM

A

DATE: 4-4-58

TO: Jess Hightower, D  
FROM: C. R. Chappell, G-13  
SUBJECT: DC-8 ROLL-OUT PRESS KITS  
COPIES TO: File

Enclosed are four copies of the DC-8 roll-out press kit for the use of media in your area on or after April 9. The actual roll-out picture will be sent April 9.

*C.R. Chappell*  
C. R. Chappell

CRC:cb  
Encl.

*"Don't phone Classified information"*

DOUGLAS DC-8 SPECIFICATIONS AT A GLANCE

Wing Span	139 feet, 9 inches
Wing Area	2758 square feet
Wing Sweepback at 25% of Chord	30°
Over-all Length	150 feet, 6 inches
Over-all Height	42 feet, 4 inches
Passengers	118 to 176

PERFORMANCE

Configuration:	<u>Domestic</u>		<u>Engines</u>		<u>International</u>
	JT3C-6 (J-57)	JT4A-3 (J-75)	JT4A-3 (J-75)	Conway	
Take-off Weight, Full Load, Lbs.	265,000	265,000	287,500	287,500	
Design Landing Weight, Lbs.	189,000	189,000	194,000	194,000	
Fuel Capacity, gallons	17,600	17,600	21,615	21,615	
Capacity Payload, Lbs.	33,040	33,040	35,680	35,680	
Cargo, Lbs.	13,900	13,900	13,900	13,900	
Level flight maximum cruise speed, 30,000 ft., 220,000 Lbs., miles per hour	561	589	589	591	
CAA Field length required at maximum take-off weight, feet.	9,130	7,020	8,410	8,470	
Field Length Required at Maximum Landing Weight, feet.	6,680	6,630	6,850	6,850	
Range from 6500 ft. runway, statute miles	2,340	3,710	3,240	3,380	
Maximum Range, statute miles	3,900	4,100	4,500	4,680	

THE DC-8, LATEST OF AN ILLUSTRIOUS LINE

When the Douglas DC-8 jetliner takes to the air, its advanced design and engineering concepts will represent the tried and true features of a long series of illustrious ancestors.

The engineers of the Douglas Aircraft company planned it that way.

Embodied in the DC-8 will be the mechanical and aerodynamic concepts which have been responsible for the consistent success of the "DC" (Douglas Commercial) series. The DC-3s, DC-4s, DC-6s, and DC-7s - and now the DC-8 - have been engineered by much the same group of men.

Each of the commercial transports hatched from the Douglas aerie has set the pace for its particular period in air transport history. Students of aviation expect the same to be true for the DC-8.

Heading the engineering team responsible for the fleets of transports which outnumber the combined output of all other aircraft builders is Arthur E. Raymond, Douglas vice president-engineering.

Next in line is E. F. Burton, chief engineer of the Santa Monica Division. He headed the engineering department which perfected the DC-3 and developed each of the succeeding commercial airliners.

Chief project engineer for the DC-8 is Ivar L. Shogran, with upwards of 25 years transport experience at Douglas. He was for many years chief of the power plant section at Santa Monica.

Also a veteran of the commercial series since the days of the DC-3 is Dr. W. Bailey Oswald, whose service with the company predates the DC-3. Dr. Oswald heads the aerodynamics section.

These men are typical of the thousands whose engineering and production experience have contributed to the DC-8.

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DOUGLAS DC-8 FACILITY

A facility as advanced as the airplane for which it was designed.

That's what Douglas Aircraft company planned for the massive new DC-8 jetliner assembly plant at Long Beach, California. Since the building were intended from the beginning to build large, jet-powered aircraft the company made certain that space would not impose any limits on the most efficient production methods.

So the \$20,000,000 facility, first to be built for the exclusive manufacture of commercial jet transports, embraces a total of more than 26 acres -- or 1,143,043 square feet.

It consists of two massive buildings, one for structures assembly and one for final assembly, plus three smaller service buildings, a paint building large enough to cover the entire DC-8 and an adjoining wing-tank sealing booth.

They are located on a 55 acre site directly east of the previously existing Long Beach Douglas plant and adjoining the Long Beach Municipal Airport, whose runways are being extended to 10,000 feet.

Production lines determined the size and dimension of the buildings. The wide bays, for example, make it possible to assemble the complete swept-wing as a single unit with only one splice on the center line of the airplane.

Floor space of the main structures is equivalent to 18 football fields, or approximately one million square feet. Twenty eight Washington Monuments would fit with ease, or seven ocean liners the size of the Queen Elizabeth could be parked side-by-side, four in the structures assembly building alone, with room for a couple of smaller ships.

Largest of the two is structures assembly, 1144 feet long and 480 feet wide. It contains three equal bays of 160 foot span.

The final assembly building also is 1144 feet long. It has two bays, one 160 feet wide and the other 200 feet.

Structures assembly is 57 feet tall at its highest point, and the final assembly building is 67 feet tall.

The north and south ends of these buildings can be opened by means of power-operated hangar-type rolling doors.

The DC-8 assembly plant was dedicated May 10, 1957, approximately 13 months after ground was broken April 2, 1956.