

Westinghouse 19A

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SP2010
WARS, Date 10/1/84

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

RESEARCH AUTHORIZATION

No. E84

Title Altitude Performance Tests of the Westinghouse 19-A Jet-Propulsion Unit By Aircraft Engine Research Laboratory

Approved _____, 194_____

Chairman, Subcommittee on _____

Issued
Approved March 3, 1944

[Signature]
Chairman, Executive Committee

Director of Aeronautical Research

In accordance with authority of the Executive Committee, March 19, 1942

Purpose of investigation (Why?)

To investigate the performance of the Westinghouse 19-A jet propulsion unit under various conditions of altitude

Brief description of method (How?)

Complete performance tests of the Westinghouse 19-A jet propulsion unit to be made in the 20-foot high speed wind tunnel at various rpm's, tunnel speeds, and inlet air temperatures. Copies of all original data and calculations as well as reduced performance curves will be submitted to the Bureau of Aeronautics.

Remarks:

Requested by Bureau of Aeronautics Navy Department in letter of February 9, 1944. Aer-E-412-WB

Dates of reports _____ Publications _____

Completed _____, 194_____

Form No. 18

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PAPERS PREPARED UNDER RESEARCH AUTHORIZATION NO. E - 84

ENTITLED Altitude Performance Tests of the Westinghouse 19-A Jet-Propulsion Unit.

Title of Paper	Received	To Army	To Navy	Publication
* Errata for Preliminary Data Part I of "Altitude-Wind-Tunnel Tests of the Westinghouse 19-B Jet-Propulsion Engine" dated 1-9-45	5-4-45	Liaison Officer at AERL	5-14-45	to Westinghouse Elec. & Manuf. Co. 5-14-45. to BAR, Pratt & Whitney, to BAR, McDonnell & AAFRR, Northrop 5-14-45
RM E7208 "Altitude-Wind-Tunnel Investigation of the 19B-2, 19B-8, and 19XB-1 Jet-Propulsion Engines. II - Analysis of Turbine Performance of the 19B-8 Engine" by R.P. Krebs & F.L. Suzzzi. Converted to E8J28a	1/24/47 10/14/48	AAF W. Field 1/31/47	1/31/47	To Westinghouse Elec. Corp. 1/31/47
RM E7D04 "Altitude-Wind-Tunnel Investigation of the 19B-2, 19B-8, and 19XB-1 Jet-Propulsion Engines. IV - Analysis of Compressor Performance." by R.O. Dietz and John K. Kuenzig. 4/25/47. Chg. to E8J28c	4/30/47 10/13/48	5/6/47	5/6/47	to Kroon, Westinghouse Elec. Corp. 5/6/47
RM E7C13 "Altitude Wind-Tunnel Investigation of the 19B-2, 19B-8, and 19XB-1 Jet-Propulsion Engines. III - Performance and Windmilling Drag Characteristics" by Wm. A. Fleming & Robt O. Dietz, Jr. 4/9/47 Chg. To. E8J28b	4/14/47 10/14/48	4/21/47	4/21/47	To Westinghouse Elec. Corp. 4/21/47
RM E7G18 "Altitude-Wind-Tunnel Investigation of the 19B-2, 19B-8, and 19XB-1 Jet-Propulsion Engines: V - Combustion-Chamber Performance." by B. Boyd. Above converted to E8J28d	7/31/47 10/14/48	8/4/47		To Westinghouse Elec. Corp. 8/4/47

Final paper received by Committee (completion of authorization) _____

Checked by AERL _____

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PAPERS PREPARED UNDER RESEARCH AUTHORIZATION NO. E-84

ENTITLED Altitude Performance Tests of the Westinghouse 19-A Jet-Propulsion Unit.

Title of Paper Received To Army To Navy Publication

Preliminary Data, "Altitude-Wind-Tunnel Tests of the West-
inghouse 19-B Jet-Propulsion Engine - Part VI" 1-1-45 1-9-45 1-12-45 to Westinghouse Elec. &
Manuf. Co. 1-12-45

Preliminary Data, "Altitude-Wind-Tunnel Tests of the West-
inghouse 19-B Jet-Propulsion Engine - Part VII" 1-3-45) 1-9-45 1-12-45 to Westinghouse Elec. &
Manuf. Co. 1-12-45

Preliminary Data, "Altitude-Wind-Tunnel Tests of the West-
inghouse 19-B Jet-Propulsion Engine, Part VIII" 1-3-45) 1-9-45 1-12-45 to Westinghouse Elec. &
Manuf. Co. 1-12-45

Preliminary Data, "Altitude-Wind-Tunnel Tests of the West-
inghouse 19-B Jet-Propulsion Engine, Part IX" 1-5-45 1-11-45 1-12-45 to Westinghouse Elec. &
Manuf. Co. 1-12-45

* Preliminary Data, "Altitude-Wind-Tunnel Tests of the West-
inghouse 19-B Jet-Propulsion Engine, Part X" 1-9-45 1-15-45 1-20-45 to Westinghouse Elec. &
Manuf. Co. 1-20-45

Preliminary Data, "Altitude Wind-Tunnel Tests of the West-
inghouse 19-B Jet-Propulsion Engine, "Parts I to X,
inclusive to Boef A Representative,
Pratt & Whitney &
McDonnell 2-16-45

Preliminary Data, "Altitude-Wind-Tunnel Tests of the West-
inghouse 19-B Jet-Propulsion Engine, part XI" 1-15-45 4-23-45 Liaison Officer
at AERL 5-12-45 to AAF Insp. Northrop
Aircraft, Inc. 2-16-45
to Westinghouse Elec. &
Manuf. Co. 5-12-45

Preliminary Data, "Altitude-Wind-Tunnel Tests of the West-
inghouse 19-B Jet-Propulsion Engine, " Part XII, " 1-25-45) 4-23-45 Liaison Officer
at AERL 5-12-45 to Westinghouse Elec. &
Manuf. Co. 5-12-45

Preliminary Data parts XI and XII of above subject title
were sent to
parts XI & XII to
BAR, East Hartford, Conn. &
BAR, Robertson, Mo. 5-12-45
AAF Inspector, Hawthorne,
Calif. 5-12-45

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PAPERS PREPARED UNDER RESEARCH AUTHORIZATION NO. E-84

Entitled Altitude Performance Tests of the Westinghouse 19-A Jet-Propulsion Unit.

Title of Paper	Received	To Army	To Navy	Publication
Preliminary Data, "Altitude-Wind-Tunnel Tests of the Westinghouse 19-B Jet-Propulsion Engine - Part I," dated 11-9-44	11-18-44		11-24-44	to Insp. Machinery of Westinghouse Elec. & Mfg. Co. 11-24-44
Preliminary Data, "Altitude-Wind-Tunnel Tests of the Westinghouse 19-B Jet-Propulsion Engine - Part II," dated 12-18-44	12-26-44		1-3-45	to Insp. Machinery of Westinghouse Elec. & Mfg. Co. 1-3-45
Preliminary Data, "Altitude-Wind-Tunnel Tests of the Westinghouse 19-B Jet-Propulsion Engine - Part III," dated 12-22-44	1-1-45		1-3-45	to Insp. Machinery of Westinghouse Elec. & Mfg. Co. 1-9-45
Preliminary Data, "Altitude-Wind-Tunnel Tests of the Westinghouse 19-B Jet-Propulsion Engine - Part IV," dated 12-27-44	1-1-45		1-3-45	to Insp. Machinery of Westinghouse Elec. & Mfg. Co. 1-3-45
Preliminary Data, "Altitude-Wind-Tunnel Tests of the Westinghouse 19-B Jet-Propulsion Engine - Part V," dated 12-27-44	1-1-45		1-3-45	to Insp. Machinery of Westinghouse Elec. & Mfg. Co. 1-9-45
Preliminary Analysis, "Altitude-Wind-Tunnel Tests of the Westinghouse 19B and 19XB Jet-Propulsion Engines, Part I," dated 12-6-44) 12-14-44			12-18-44	to Insp. Machinery of Westinghouse Elec. & Mfg. Co. 12-18-44
Memo: "Information regarding the windmill drag Measured on the Westinghouse 19-B Engine during the Altitude wind tunnel tests." Prepared by A. Silverstein, dated 12-15-44) 12-22-44				

Final paper received by Committee (completion of authorization) _____

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