## PROPOSED STATEMENT OF WORK - PROJECT NO. 1794

## ITE. 1. LNGINE KING PROCRAM

- a. The Contractor shall conduct analytical investigations and design studies to determine the performance capabilities and design features of a flat vertical take-off, supersonic aircraft based upon the principles essentially as described in A.V. Roe Canada Limited Brochure No. 1, "Project Y2 Flat Vertical Take-off Supersonic Gyroplane" dated June 1954. (Secret Title, Secret Report), and A. V. Roe Canada Limited Development Proposal "Project Y2" (Secret Title, Secret Report). The purpose of this investigation is to obtain sufficient analytical, design and test results to determine the practicability of developing a vertical take-off vehicle exploiting the Contractor's design principles.
- b. Design configuration effort shall be confined to the minimum required for demonstration of principles in a practical application which will serve as a basis for further development. The major areas of investigation in order of priority will be:
  - (1) Air cushion effect
  - (2) Stability of multi-engine configuration
  - (3) Air intake and gas exhaust systems
  - (4) Aircraft performance, stability, and control
  - (5) Radial flow engine feasibility
- c. The Contractor shall conduct special studies in the major areas of investigation to include, but not be limited to:
  - (1) Air cushion effect
    - a. Phenomenon
    - b. Scale effoct
    - c. Effect of jet aspect ratio
    - d. Effect of chord plane to ground angle
    - e. Jet angle to ground
    - f . Under surface contour
    - g. Changes in planform



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ARDC RESEARCH AND PELOPMENT AND THE REPORT		ARDC-D15
	PROJECT - TASK	25 February 1955
1. TITLE		2. NUMBER
(S) 4 Code Name (S) Remuneration		1794
RESPONSIBLE CENTER	4. PROJECT SUPPORT SYSTEM(S)	S. FORMER PROJECT(S) NUMBER
Wright Air Development Center	None	None
6. PRIORITY	7. HQ ARDC	S. SECURITY
1-C	RDTDP	Secret
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William R. Stephens Major, U	SAF DIL	OINA
REMARKS		
Description of the second of t	Development Plan No. 1794,	dated 15 September 1954,
are as follows:		
a. Block No. 1		
	ird (Secret) should be, "C	
(Secret) in accordance with	Hq ARDC Message No. RDACT-1	2-22-E, dated 8 December
1954.		(SECRET)
b. Block No. 12		4SECHET)
D. Block No. 12		
"Technical Requi	rement #3, 13 August 1954"	should be changed to
Amendment #1 (dated 17 Januar		
1954" in accordance with "Can	cellation of Technical Requ	irements" dated 17 January
1955, Hq ARDC.	Augustreamin tulkum amini o	(UNCLASSIFIED)
plast 21	4	(ONODINOS II IDD)
c. Block 21	istic – Hing militaris	inskiji i
Major William R.	Stephens, WCSBA, Ext. 3132	4. has been appointed as
project officer.		(UNCLASSIFIED)
	AND COLORS OF SECTION	(UNCLASSIFIED)
d. Block 22		
Due to a company	reorganization effective 1	Tanuary 1055 the name of
the contractor should be change		
one contractor greater be chara	sou oo. avito all'oraro himi	(UNCLASSIFIED)
e. Block 30, Paragra	aph r(1)	and the state of t
Dalata Met the as	arliest possible date" from	the statement of the
program objective to become co		
		(UNCLASSIFIED)
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## SECRET

## i. (continued)

These changes are required to reflect the reorientation required by PDD No. 1794, dated 12 January 1955. (UNCLASSIFIED)

j. Block 30, Paragraph r(6) References

Replace 3., which lists TR#3, with Amendment #1 (dated 17 January 1955) to TR #54 dated 26 October 1954, in accordance with "Cancellation of Technical Requirements" dated 17 January 1955. Hq ARDC. (UNCLASSIFIED)

- 2. Items of Interest to Management
- a. Purchase Request No. 89221, dated 6 December 1954, was processed on 19 January 1955, following release of funds by Hq ARDC. Meetings with the contractor were held on 27 January and 9 February 1955, to discuss contractual arrangements and the Proposed Statement of Work. Formal contract negotiation procedures are being initiated during the week of 20 February 1955. (UNCLASSIFIED)
- b. AVRO Aircraft Limited has proceeded with a development program, financed by corporate funds. (UNCLASSIFIED)
- c. Funds for contract services programmed by the Development Plan amounted to \$2,494,000 for the first step of the program which is to be a one year's effort directed toward the resolution or clarification of many of the problem areas involuin the development of this new type aircraft. As a result of subsequent discussiwith Hq ARDC personnel, the planned scope of the program was reduced to involve an estimated cost of one million dollars for the first year and in November 1954, the Fiscal Branch of WADC was advised that 1.2 million dollars was to be released for Project 1794. Funds actually released on or about 17 January 1955, amounted to \$500,000. The Proposed Statement of Work was revised to reflect the changes to the Project Development Plan given under 1. above and provide for the minimum investigations necessary to furnish a basis for a decision as to the ultimate worth of the project. The contractor's cost estimates based on the Revised Proposed Statement of Work should be available about 1 March 1955, and the effect on the program of the reduction in funds discussed above will be evaluated at that time. (SECRET

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