

QCX
Avro
CF105
R7-0590-
2003
Iss-B



TECHNICAL REPORT



A. V. ROE CANADA LIMITED
MALTON - ONTARIO

TECHNICAL DEPARTMENT (Aircraft)

ANALYZED

AIRCRAFT: C105

REPORT NO. 7/0590/2003

FILE NO.

NO. OF SHEETS: 12

TITLE

LANDING GEAR DESIGN CASES.

~~CONFIDENTIAL~~

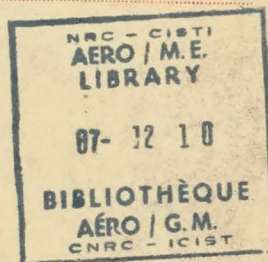
Classification cancelled / Changed to UNCLASS

By authority of AVRS

Date 30.8.06

Signature APR. 01

Unit / Rank / Appointment AVRS 5



PREPARED BY G.L. OATES DATE FEB 26, 54

CHECKED BY _____ DATE _____

SUPERVISED BY _____ DATE _____

APPROVED BY _____ DATE _____

ISSUE NO.	REVISION NO.	REVISED BY	APPROVED BY	DATE	REMARKS
<u>B</u>	<u>1</u>	<u>G.L. OATES</u>			<u>NEW ALL-UP WEIGHTS</u>

15867302

A. V. ROE CANADA LIMITED
MALTON - ONTARIO

TECHNICAL DEPARTMENT (Aircraft)

REPORT NO. 7/0590/2003

SHEET NO. 11

AIRCRAFT:

C105

LANDING GEAR

PREPARED BY

DATE

G.L. OATES

FEB 26 54

CHECKED BY

DATE

CONFIDENTIAL

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TECHNICAL DEPARTMENT (Aircraft)

REPORT NO. 7/0590/2003

SHEET NO. 14

AIRCRAFT:

C125

LANDING GEAR

PREPARED BY

DATE

G. L. OATES

FEB 26 54

CHECKED BY

DATE

INTRODUCTION

THE FOLLOWING REPORT IS BASED ON THE REVISED PRELIMINARY WEIGHTS, AN ASSUMED C.G. ENVELOPE, (C.G. FORWARD 27% & C.G. AFT 31% M.A.C.) PRELIMINARY GEOMETRY (SEE DRG. 7-0120-0001) & COEFFICIENT OF LIFT, $C_L = 1.0$ FOR THE LANDING CONFIGURATION & 1.67 FOR THE TAKE OFF CONFIGURATION.

ALL CASES FOR LANDING, TAXIING & HANDLING CONDITIONS ARE BASED ON ANC-2 & MIL-T-6053A (IN ITS PRELIMINARY FORM). FOR LANDING CONDITIONS IT IS ASSUMED THAT THE AIRCRAFT IS FULLY AIRBORNE.

IN ORDER TO MAKE THE NOSEWHEEL SUFFICIENTLY STRONG FOR PITCHING EFFECT, DUE TO SUDDEN BRAKING, THE RESPONSE COEFFICIENT SHOULD BE CALCULATED ASSUMING THAT THE BRAKE LOAD INCREASES LINEARLY WITH INCREASE OF BRAKE PRESSURE FROM ZERO TO A MAXIMUM IN .2 SECONDS. (SEE ANC-2; 7.53a)

