

W. J. King

CONFIDENTIAL

8 December 58

Detachment Commander
1202 Technical Services Detachment
Avro Aircraft Limited
Malton, Ontario

Attention: Group Captain H.R. Footitt
Assistant for Arrow Weapons Systems

Dear Sir:

Re: Iroquois - Compressor Design Standard

This letter is to summarise the action taken with respect to establishing a satisfactory compressor standard for initial flight engines as discussed with you on December 2, 1958. The program for the 50-hour P.F.R.T. engine and for the prototype engines required by aircraft is as follows:

1. 50-Hour P.F.R.T.

(a) Engine X 113 will be built with solid titanium stators in stages six to nine inclusive. Rotor outer spacers of titanium will be incorporated in the applicable rotor positions to occupy the space formerly filled by the stator shrouds.

This engine is scheduled for completion of the 50-hour P.F.R.T. by December 24, 1958.

(b) Engine RX 105 will be built to the same configuration with the exception of solid steel stators and steel rotor outer spacers in place of the titanium components installed in X 113.

This engine is scheduled to test on January 10, 1959 with completion of the 50-hour P.F.R.T. approximately ten days later.

2. Compressor Test

A high pressure compressor test unit to the aerodynamic configuration of X 113 and RX 105 is scheduled for delivery at Malton December 5, 1958.

....2

W. J. King

Comments

19-53-2
12 Dec 58

6 December 58

Series to Aircraft 25206

Engines X 115 and X 116 will be completed to the originally defined configuration incorporating hollow shrouded stators. Provision will be made for compressor blow-off.

X 115 is scheduled for delivery to Avro December 15, 1958. - *Probably 28 Dec*
X 116 is scheduled for delivery to Avro December 24, 1958. *31 Dec*

These engines will be released for ground running only.

Engines X 117, X 121, and X 118 will be built with solid steel stators in stages six to nine with the appropriate rotor outer spacers. Provision will be made for compressor blow-off.

still possible
X 117) scheduled for delivery to Avro between
X 121) February 15 and March 1, 1959.
X 118 scheduled for delivery to Avro by March 15, 1959. *(instrumentation bla*
These will be installation engines plus spare cleared on 50-hour flight release.

4. Weight

The change to solid steel stators in stages six to nine and the associated modifications will result in an engine weight of approximately 4900 lbs. The use of titanium in place of steel for the firewall, afterburner shroud and fourth stage compressor disc will reduce this by approximately 100 lbs.

Yours very truly

ORIGINAL SIGNED BY

P.

P.Y. Davoud
Vice President
Sales and Service

.iw

cc.

A/V/M J.A. Easton
A/C G.G. Truscott
W/C D.W. Goss

cc.

Mr. E.G. Mahoney

National Archives Canada / Archives Nationales Canada

This copy is provided for research purposes only.
Responsibility regarding questions of copyright
that may arise in the use of this print is assumed
by the recipient.

Cette copie a été préparée pour fins de recherche
seulement. Le récipiendaire sera tenu responsable
de toute infraction au droit de propriété de ce
document.

RG 24 VOLUME 64.33
MG VOLUME
FILE / DOSSIER 1035.5 N-180A Vol. 36
REEL / BOBINE
DATE FEB 26 1991