Telephone : Molesey 1380.
Telegrams : Physics, Teddington.

*Any reply to this letter to
be addressed to*
THE DIRECTOR,
NATIONAL PHYSICAL LABORATORY.

NATIONAL PHYSICAL LABORATORY,
TEDDINGTON, MIDDLESEX.

29th January, 1947.

OUR REF. :— ECF/IR.

YOUR REF. :—   -

Dear Professor Fisher,

I am sorry to have taken so long to answer your letter of
November 23rd - as opportunity offered I have been looking up
Bliss's publication, and some of them have proved rather
inaccessible.

Bliss certainly inverted the Working-Hotelling argument in his
1935 paper, but I doubt whether he then realised the general
argument, since he went on using Gaddum's Pearsonian formula in
comparative assays until 1944.   Paulson gave the fiducial
distribution of the ratio of two correlated normal estimates in
1942, but so did I in 1940; what led me to it then was needing to
find fiducial limits in an insulin assay after doing a covariance
correction; but I tried to write the result in a general form.
I would of course take it as a compliment if in subsequent
editions of Statistical Methods you referred to my note - I agree
that the basic idea of equating the significance level of t
to the expression (once one has found it) involving the unknown
α is a standard one; I think I first learnt it from §62 of
Design of Experiments.

I/

Professor R.A. Fisher, F.R.S.,
Department of Genetics, C.U.,
Whittingehame Lodge,
44, Storey's Way,
Cambridge.

I have been going through some papers that I had to
store when I left Nottingham in 1942, and have come across some
copies of some tables that I had just finished calculating for
the Pharmacology Department at Boots.   Their object was to
provide a rapid means of calculating a first approximation to
a dosage-mortality line, using ordinates and weights calculated
à la Gaddum from the observed mortalities.   I have not
rechecked the calculations (although as far as I remember they
were fairly carefully checked at the time), but I am enclosing
a marked copy now because there are some minor disagreements
between them and Table X in the 2nd edition of Statistical
Tables.

Yours sincerely,

E. C. Fieller

E. C. FIELLER.

P.S.   I had hoped to come to your Statistics?
meeting tonight, but my wife + small boy are
both laid up, + I have to nurse them instead.