

INTER-OFFICE MEMO

TO P.M. Reed

AT Burlington

DATE November 17, 1975

FROM R. W. Kanzler

AT Burlington

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File

SUBJECT: Determination of Additional Mask Time
Required with the Use of Fresh Air Capsules

The following calculations were used for the subject determinations:

From the TWA calculation
$$\text{TWA} = \frac{A(V) + Y(0.1) + Z(0)}{8}$$

where $A = 8 - Y - Z$

V = weighted exposure for A hours

Y = time in air capsule at 0.1 ppm
(for Flemington 0.2 and 0.3 ppm
were used)

Z = time in air mask at 0 exposure

establishing

$$V = \frac{[8(TWA) - Y(0.1) - 2(0)]}{A}$$

Using V, the maximum time for exposure V to yield a TWA of 1 ppm (W) was calculated.

$$W = \frac{8 - Y(0.1) - Z(0)}{V}$$

which gave the additional mask time required (B) by

B = 8-W-Y-Z.

E. Young wrote a computer program utilizing the above calculations.

Aud W. Kingle.

F.W. Kanzler

FWK/jst