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NON-ISOENERGETIC TURBULENT (Pr_t=1) JET MIXING BETWEEN TWO COMPRESSIBLE STREAMS AT CONSTANT PRESSURE

by H. H. Korst and W. L. Chow

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UNIVERSITY OF ILLINOIS
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for

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FOREWORD

This research was carried out under Research Grant No. NsG-13-59, "Basic Research Investigation on Flow Mechanism and Heat Transfer in Separated Flows."

The present note is the second of a series dealing with mechanisms of energy transfer to and across dissipative wake flow regions.

Dr. H. H. Korst acted as project supervisor, while Dr. W. L. Chow, as principal investigator, prepared and supervised the calculation carried out on the electronic digital computers at the Engineering Research Laboratory of the University of Illinois (ILLIAC, IBM 7094).

Abstract

Theoretical treatment of compressible constant pressure two-dimensional non-isoenergetic (Pr_t=1) jet mixing between two uniform streams based on integral methods. Definition, graphical and tabulated presentation of auxiliary functions pertaining to the kinematic, dynamic, dissipative, and thermodynamic characteristics of flow fields having fully established similarity profiles. Extension of such results to account for effects of initially disturbed mixing profiles by utilization of the momentum integral forming the basis of the "equivalent mass bleed concept."

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SYMBOLS

C_f	friction coefficient
C_p	specific heat at constant pressure
C	$C = \frac{u}{\sqrt{2C_p T_o}}$ Crocco number
G_B	mass bleed
M	Mach number
Pr_t	turbulent Prandtl number
St	Stanton number
T	absolute temperature
t	time
u	velocity component in x - direction
v	velocity component in y - direction
x, y	coordinates in the intrinsic coordinate system
X, Y	coordinates in the reference coordinate system
y_m	defined by $y = Y + y_m(x)$, see text
Δa	defined by $\Delta a = \frac{\theta_a}{x}$
Δb	defined by $\Delta b = \frac{\rho_b}{\rho_a} \varphi_b^2 \frac{\theta_b}{x}$
δ	boundary layer thickness
δ^*, θ	displacement and momentum thickness of the boundary layer
δ_e^*	displacement thickness due to "entrainment"
ϵ	eddy diffusivity
ϵ_∞	ϵ for free turbulent flow
η_p	position parameter

η_m	dimensionless shift of the intrinsic system of coordinates with respect to reference coordinate system
η	$\eta = \zeta \eta_p$, $\eta = \sigma \frac{y}{x}$ when $\eta_p \to 0$
Λ	$\Lambda = \frac{T_o}{T_{oa}}$ the stagnation temperature ratio
ξ	transformed coordinate defined by $\xi = \frac{1}{2\sigma^2} \int^{\psi} \psi f(\psi) d\psi$
ρ	mass density
σ	similarity parameter for the homogeneous coordinate system
τ_t	turbulent shear stress
φ	$\varphi = \frac{u}{u_a}$ dimensionless velocity
φ'	$\varphi' = \frac{v}{u_a}$
φ_{2a}, φ_{2b}	initially disturbed velocity profiles
ψ, ζ	$\psi = \frac{x}{\delta_a}$, $\zeta = \frac{y}{\delta_a}$ dimensionless coordinates
Ω	Energy transport rate per unit width and per unit length along the jet mixing region

Subscripts

a	refers to conditions of the primary free stream
b	refers to conditions of the secondary free stream
d	refers to "discriminating" streamline
j	refers to jet boundary streamline
ℓ	refers to local position
o	refers to stagnation value
R_a, R_b	refers to large positive and negative values of η or Y
t	turbulent
I	refers to single stream mixing
II	refers to two-stream mixing

Auxiliary integrals and functions

$$I_1\left(\eta,\ C_a^2,\ \frac{T_{ob}}{T_{oa}},\ \varphi_b\right) \equiv \frac{\eta_{R_b}(1-C_a^2)\,\varphi_b}{\frac{T_{ob}}{T_{oa}} - C_a^2\,\varphi_b^2} + \int_{\eta_{R_b}}^{\eta} \frac{(1-C_a^2)\,\varphi}{\Lambda - C_a^2\,\varphi^2}\, d\eta$$

$$I_2\left(\eta,\ C_a^2,\ \frac{T_{ob}}{T_{oa}},\ \varphi_b\right) \equiv \frac{\eta_{R_b}(1-C_a^2)\,\varphi_b^2}{\frac{T_{ob}}{T_{oa}} - C_a^2\,\varphi_b^2} + \int_{\eta_{R_b}}^{\eta} \frac{(1-C_a^2)\,\varphi^2}{\Lambda - C_a^2\,\varphi^2}\, d\eta$$

$$I_3\left(\eta,\ C_a^2,\ \frac{T_{ob}}{T_{oa}},\ \varphi_b\right) \equiv \frac{\eta_{R_b}(1-C_a^2)\,\frac{T_{ob}}{T_{oa}}\,\varphi_b}{\frac{T_{ob}}{T_{oa}} - C_a^2\,\varphi_b^2} + \int_{\eta_{R_b}}^{\eta} \frac{(1-C_a^2)\,\Lambda\,\varphi}{\Lambda - C_a^2\,\varphi^2}\, d\eta$$

$$I_4\left(\eta,\ C_a^2,\ \frac{T_{ob}}{T_{oa}},\ \varphi_b\right) \equiv \int_{\eta_{R_b}}^{\eta} \frac{(1-C_a^2)\,\varphi\,(\varphi^2-\varphi_b^2)}{\Lambda - C_a^2\,\varphi^2}\, d\eta$$

E	auxiliary dimensionless energy transfer function
E_m	dimensionless mechanical energy transfer function
ϵ	eddy diffusivity function
$\mathcal{T}$	dimensionless shear stress function
Φ	mechanical energy dissipation function

1. INTRODUCTION

A considerable amount of effort has been devoted in the past to the study of jet mixing (Ref. 1, 2, 3, 4, 5, 6, and many others). Particularly in problems involving flow separations and fully separated flows, the jet mixing between the main stream and the fluid entrained from the wake is a flow component of foremost importance. It provides the mechanism for the transfer of mechanical energy to the wake flow, contributes to determining the conditions near reattachment and, when finite wake velocities are to be considered, allows to define a dissipative mechanism within the wake.

Previous studies on the dynamic aspects of the "separated flow" problems (e.g., in the prediction of base pressures) usually adopted a simplified concept of "semi-dead" wake flow, namely, that the induced wake flow is at such a low velocity level that the wake may be considered to be essentially stagnate. Such simplifying assumption has been applied to predict the pressure level within the wake and the end results thus obtained often proved to be useful.

However, in the study of the thermodynamic aspects of the separated flow problems (e.g., the heat transfer to and across the wake), the concept of the semi-dead wake can no longer be adopted. Indeed, without finite wake velocities, one would not be able to account for the convective heat exchange between the wake flow and the relined walls bounding the separated flow regions. Thus, finite wake velocities will:

i) influence the jet-mixing component of wake flows,
ii) control the transfer of mechanical energy to the wake,
iii) provide for the mechanism of dissipating this energy within the wake (Ref. 7),
iv) allow to establish a physically perceptive model for the energy transfer (including heat transfer) to and across separated flow regions, by recognizing the role of the recirculating thermal boundary layer developing along the walls and discharging into the mixing region near the origin (Ref. 8, 9).

Generally, the flow pattern in wakes is so complicated that even steady state velocity fields will defy accurate description. Nevertheless, it is possible to identify certain representative finite wake flow velocities and to associate them with the problem of jet mixing between two uniform streams (Ref. 7, 8).

The present communication is concerned with isobaric turbulent jet mixing between two compressible non-isoenergetic streams of

identical compositions having an effective turbulent Prandtl Number of unity.

As in the single stream mixing case (Ref. 3, 4), the continuity and momentum integral methods used in establishing the mixing profiles imply that integral representations for energy transfer functions are better justified and more conveniently applied than methods requiring differentiations of the mixing profiles. In order to eliminate the influence of the specific heat ratio, the Crocco Number is adopted as parameter to introduce compressibility effects. For similarity profiles, a simple empirical proportionality factor, σ, is needed to relate the auxiliary integrals to corresponding physical quantities. Since the present knowledge of σ is inadequate, especially for the two-stream mixing case, a method is outlined showing how to derive values applicable to two-stream mixing from those somewhat better defined for the single stream case.

2. THEORETICAL ANALYSIS

The present analysis on the turbulent jet mixing between two streams follows essentially the approach advanced earlier to deal with the mixing between one stream and the quiescent fluid (Ref. 3, 4). However, for the sake of completeness and consistency, the extension of the analysis to the present problem is carried out in sufficient detail to include the necessary re-formulations and to avoid misinterpretation of the results.

It must be emphasized at the outset that the main information included in this report is based on the adoption of the error function for representing velocity profiles in the mixing region. This profile, together with the assumption of an effective turbulent Prandtl Number of unity, the adoption of Crocco's integral in relating the velocity profile to the enthalpy distribution, is subsequently utilized in satisfying, in integral form, the continuity equation, momentum equation, and energy equation for parts of, or the entire mixing region.

The choice of the error profile for the velocity distribution appears to be justified by experimental evidence, almost regardless of free stream Mach Number, particularly for the region of higher velocities which contribute most significantly within the integral method employed and to the integral presentations chosen.

While the choice of the error function is primarily justified for similar (fully developed) velocity profiles, it shall be pointed out that such profiles may also be applied to cases where relatively small initial disturbances are to be accounted for in the mixing zone (equivalent bleed concept - external shifts of flow profiles), again as a consequence of the integral methods used.

In spite of the ultimate preference for the error function velocity profile, it is instructive to interpret the development of similarity profiles from initially disturbed mixing regions by reverting to a highly simplified linearized equation of motion in order to satisfy initial and boundary conditions for obtaining a general solution for the velocity profile in an intrinsic (floating) coordinate system, which is subsequently localized within the physically determined reference system of coordinates by satisfying the momentum and continuity integrals.

2.1 The Initially Disturbed Velocity Profile, Based on a Simplified Equation of Motion

Referring to Fig. 1, where the flow model for the present jet

mixing problem is depicted, the velocity profiles of the two streams prior to the mixing region usually exhibit the characteristics of boundary layer flows. To investigate the subsequent mixing mechanism between the streams, one may write the equation of motion for isobaric mixing

$$u \frac{\partial u}{\partial x} + v \frac{\partial u}{\partial y} = \epsilon \frac{\partial^2 u}{\partial y^2} \tag{1}$$

where ϵ is the (apparent) eddy diffusivity for the turbulent flow. Introducing the dimensionless variables (see Fig. 1 for the normalization parameters)

$$\varphi = \frac{u}{u_a}, \qquad \psi = \frac{x}{\delta_a}, \qquad \zeta = \frac{y}{\delta_a}$$

and assuming that the expression

$$\epsilon = \epsilon_\infty f(\psi) \tag{2}*$$

is to hold, where ϵ_∞ is equal to

$$\epsilon_\infty = \frac{1}{4\sigma^2} \times (u_a + u_b) \quad **$$

according to Gortler (Ref. 1) for free turbulent flows, Eqn. 1 now becomes

$$\frac{\partial \varphi}{\partial \psi} = \frac{1}{2\sigma^2} \psi f(\psi) \frac{\partial^2 \varphi}{\partial \zeta^2} \tag{3}$$

Herein, it has been assumed that v is negligible and that u can be approximated by $\frac{(u_a+u_b)}{2}$ in the sense of Pai's small perturbation concept (Ref. 2).

The expression given in Eqn. (2) formally links the problem of the initially disturbed mixing region with the simpler one for the mixing between uniform streams if $f(\psi) \to 1$ when $\psi \to \infty$. ***

* It should be noted that ϵ and ϵ_∞ also vary in the lateral direction y, and the expressions introduced here imply that the average values across the mixing region have been employed.

** Introducing σ at this early stage is only intended to conform with the expression introduced by Gortler for "fully-developed Profiles." The value of σ for such a mixing region under restricted conditions will depend upon the velocity and temperature ratios across the jet mixing region, as well as a characteristic Mach Number. A discussion on the value of σ is given in section 2.2.4.

*** See Ref. 3 for the discussion and the form of $f(\psi)$ for some flow cases.

2.1.1 General Solution for the Velocity Profile in Intrinsic Coordinate System

Introducing a new variable ξ, by

$$\xi = \frac{1}{2\sigma^2} \int^{\psi} \psi \, f(\psi) \, d\psi \tag{4}$$

Eqn. (3) is transformed into

$$\frac{\partial \varphi}{\partial \xi} = \frac{\partial^2 \varphi}{\partial \zeta^2} \tag{5}$$

the linear heat conduction equation with unity diffusivity, and the initial and the boundary conditions for equation (5) are now

$$\begin{aligned}
&\varphi(0, \zeta) = \varphi_b \quad \text{for} \quad -\infty < \zeta \leq -\frac{\delta_b}{\delta_a} \\
&\varphi(0, \zeta) = \varphi_{2b}(\zeta) \quad \text{for} \quad \frac{\delta_b}{\delta_a} \leq \zeta \leq 0 \\
&\varphi(0, \zeta) = \varphi_{2a}(\zeta) \quad \text{for} \quad 0 \leq \zeta \leq 1 \\
&\varphi(0, \zeta) = 1 \quad \text{for} \quad 1 \leq \zeta < \infty \\
&\varphi(\xi, \zeta) \to \varphi_b \quad \text{for} \quad \zeta \to -\infty \\
&\varphi(\xi, \zeta) \to 1 \quad \text{for} \quad \zeta \to +\infty
\end{aligned} \tag{6}$$

The solution of equation (5) satisfying the conditions in (6) is

$$\begin{aligned}
\varphi(\eta, \varphi_{2a}, \varphi_{2b}, \varphi_b, \eta_p) = \frac{1}{2} \Big[(1+\varphi_b) + \operatorname{erf}(\eta - \eta_p) - \\
\varphi_b \operatorname{erf}\left(\eta + \frac{\delta_b}{\delta_a} \eta_p\right) \Big] + \frac{1}{\sqrt{\pi}} \Bigg(\int_{\eta}^{\eta + \frac{\delta_b}{\delta_a} \eta_p} \varphi_{2b}\left(\frac{\eta - \beta}{\eta_p}\right) e^{-\beta^2} d\beta \\
+ \int_{\eta - \eta_p}^{\eta} \varphi_{2a}\left(\frac{\eta - \beta}{\eta_p}\right) e^{-\beta^2} d\beta \Bigg)
\end{aligned} \tag{7}$$

where

$$\eta_p = \frac{1}{2\sqrt{\xi}}$$

$$\eta = \zeta \eta_p$$

and

$$\operatorname{erf} \eta = \frac{2}{\sqrt{\pi}} \int_0^{\eta} e^{-\beta^2} d\beta$$

It should be pointed out that η_p, termed as the "position parameter," incorporates the influence of the initially disturbed mixing profile. This influence will decrease as one proceeds downstream (see Eqn. 7) eventually reaching the asymptotic (similarity) solution as η_p approaches zero (fully developed profile).

2.1.2 The Temperature and the Density Profiles

For fluids of unity (turbulent) Prandtl Number, Crocco's energy integral relationship is applicable and the stagnation temperature distribution can be uniquely related to the velocity field throughout such a jet mixing region. Accordingly, one may present the stagnation temperature profile by

$$\Lambda = \frac{T_o}{T_{oa}} = \frac{T_{ob}}{T_{oa}} \frac{1 - \varphi}{1 - \varphi_b} + \frac{\varphi - \varphi_b}{1 - \varphi_b} \tag{8}$$

The static temperature ratio is then of the form

$$\frac{T}{T_a} = \frac{\rho_a}{\rho} = \frac{\Lambda - C_a^2 \varphi^2}{1 - C_a^2} \tag{9}$$

where C_a is the Crocco Number of the free stream.

2.1.3 Localization of the Flow Profiles in the Reference System of Coordinates

Owing to the sweeping simplifications introduced into the equation of motion, the velocity and the temperature profiles thus obtained for the jet mixing region are interpreted to hold within an intrinsic system of coordinates (x, y) (Ref. 3). This intrinsic coordinate system differs from the physical (or reference) system of coordinates* (X, Y), by a shift (rotation) of y_m in the Y direction, namely,

$$x \cong X$$

$$y = Y + y_m(x) \quad \text{with } y_m(0) = 0$$

where $y_m(x)$ may be determined with the help of integral relations obtained from conservation principles.

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* The reference system of coordinates is the orthogonal and generally curvilinear system of coordinates which follows the jet boundary of the corresponding inviscid jet (see Ref. 3).

Applying the continuity and momentum relations to the control volume shown in Fig. 1, one obtains

$$\rho_b u_b (-\delta_b - Y_{R_b}) + \int_{-\delta_b}^{0} \rho u \, dY + \int_0^{\delta_a} \rho u \, dY + (Y_{R_a} - \delta_a) \rho_a u_a$$

$$+ \int_0^x \rho_b v_b \, dx = \int_{Y_{R_b}}^{Y_{R_a}} \rho u \, dy + y_m (\rho_a u_a - \rho_b u_b) \qquad (10)$$

$$\rho_b u_b^2 (-Y_{R_b} - \delta_b) + \int_{-\delta_b}^{0} \rho u^2 \, dY + \int_0^{\delta_a} \rho_u{}^2 \, dY + (Y_{R_a} - \delta_a)$$

$$\rho_a u_a^2 + u_b \int_0^x \rho_b v_b \, dx = \int_{Y_{R_b}}^{Y_{R_a}} \rho u^2 dy + y_m (\rho_a u_a{}^2 - \rho_b u_b{}^2) \qquad (11)$$

where Y_{R_a} and Y_{R_b}, corresponding to η_{R_a} and η_{R_b} respectively, are the large positive and negative quantities of Y, such that

$$u_a - u (\eta_{R_a}) < \epsilon_a'$$

$$u (\eta_{R_b}) - u_b < \epsilon_b'$$

$$| T_{oa} - T_o (\eta_{R_a}) | < \epsilon_a''$$

$$| T_{ob} - T_o (\eta_{R_b}) | < \epsilon_b''$$

ϵ_a', ϵ_a'', ϵ_b', and ϵ_b'' being arbitrarily small quantities. Combining equations (10) and (11) and introducing the dimensionless variables, one obtains

$$\eta_m = \eta_{R_a} - \frac{1}{1-\varphi_b} \left[(1-C_a{}^2) \left(\int_{\eta_{R_b}}^{\eta_{R_a}} \frac{\varphi^2}{\Lambda - C_a{}^2 \varphi^2} \, d\eta - \varphi_b \int_{\eta_{R_b}}^{\eta_{R_a}} \right. \right.$$

$$\left. \left. \frac{\varphi}{\Lambda - C_a{}^2 \varphi^2} \, d\eta \right) + \eta_p \left(\frac{\theta_b}{\delta_a} \frac{\rho_b}{\rho_a} \varphi_b{}^2 + \frac{\theta_a}{\delta_a} + \frac{\delta_a{}^* (1-\varphi_b)}{\delta_a} \right) \right] \qquad (12)$$

where $\eta_m = \zeta_m \eta_p = \frac{y_m}{\delta_a} \eta_p$, and θ_a, θ_b, $\delta_a{}^*$, $\delta_b{}^*$ are the momentum and displacement thicknesses of the boundary layers of the approaching streams.

2.1.4 Jet Boundary Streamline

The jet boundary streamline is defined to be the one which divides the fluids of the two streams. By applying the integral mass conservation principle, it may be shown that the jet boundary streamline (identified by the subscript j) will satisfy the condition

$$\int_{\eta_j}^{\eta_{R_a}} \frac{(1-C_a^2)\varphi}{\Lambda - C_a^2 \varphi^2} d\eta = \eta_{R_a} - \eta_p \frac{\delta_a^*}{\delta_a} - \eta_m \qquad (13)$$

In an attempt to study the influence of the initial disturbance to the development of the velocity (temperature) profile in mixing region, one has to know the variation of $\eta_p(\psi)$ along the course of mixing (or of $f(\psi)$ defined in equation (2)). At present, the information concerning $\eta_p(\psi)$ and $f(\psi)$ is very limited (Ref. 10) except for their asymptotic behavior, i.e., $\eta_p \to 0$, $f(\psi) \to 1$, as $\psi \to \infty$. Nevertheless, the relations presented so far are useful in that it may be incorporated to explore to a certain extent the effect of the initially disturbed profile on separated flow problems. In particular, the utilization of the presented integrals will be of greater practical value through the "equivalent bleed" concept (Ref. 7, 11) which will be discussed in section 2.3.

2.2 Restricted Case

In cases of thin approaching boundary layers in both streams, or for locations far downstream of the mixing region, ξ will approach the value of $\frac{\psi^2}{4\sigma^2}$, and η_p will approach $\frac{\sigma\delta_a}{x}$, which becomes vanishingly small. This leads to a flow problem with no characteristic reference length, and establishes similarity profiles which depend on ratios of coordinates only as $\eta \to \sigma\frac{y}{x}$. The results thus obtained will be independent of the Reynold's Number.* The asymptotically reached case where $\eta_p = 0$ is here referred to as the restricted case.

2.2.1 Velocity Profile

Introducing $\eta_p = 0$ for the restricted case into equation (7), the velocity profile for such a mixing region becomes

$$\varphi(\eta, \varphi_b) = \frac{1+\varphi_b}{2} + \frac{1-\varphi_b}{2} \operatorname{erf} \eta \qquad (7a)$$

(See Fig. 2)

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* One may interpret that the results hold true for large Reynold's Numbers.

2.2.2 Auxiliary Integrals

It is convenient to introduce auxiliary integrals pertaining to the present analysis which are defined as follows:

$$I_1(\eta,\ C_a^2,\ \frac{T_{ob}}{T_{oa}},\ \varphi_b) = \frac{\eta_{R_b}(1-C_a^2)\,\varphi_b}{\frac{T_{ob}}{T_{oa}} - C_a^2\,\varphi_b^2} + \int_{\eta_{R_b}}^{\eta} \frac{(1-C_a^2)\,\varphi}{\Lambda - C_a^2\,\varphi^2}\, d\eta$$

$$I_2(\eta,\ C_a^2,\ \frac{T_{ob}}{T_{oa}},\ \varphi_b) = \frac{\eta_{R_b}(1-C_a^2)\,\varphi_b^2}{\frac{T_{ob}}{T_{oa}} - C_a^2\,\varphi_b^2} + \int_{\eta_{R_b}}^{\eta} \frac{(1-C_a^2)\,\varphi^2}{\Lambda - C_a^2\,\varphi^2}\, d\eta$$

$$I_3(\eta,\ C_a^2,\ \frac{T_{ob}}{T_{oa}},\ \varphi_b) = \frac{\eta_{R_b}(1-C_a^2)\,\frac{T_{ob}}{T_{oa}}\,\varphi_b}{\frac{T_{ob}}{T_{oa}} - C_a^2\,\varphi_b^2} + \int_{\eta_{R_b}}^{\eta} \frac{(1-C_a^2)\,\Lambda\,\varphi}{\Lambda - C_a^2\,\varphi^2}\, d\eta$$

$$I_4(\eta,\ C_a^2,\ \frac{T_{ob}}{T_{oa}},\ \varphi_b) = \int_{\eta_{R_b}}^{\eta} \frac{(1-C_a^2)\,\varphi(\varphi^2-\varphi_b^2)}{(\Lambda - C_a^2\,\varphi^2)}\, d\eta$$

For fixed values of C_a^2, $\frac{T_{ob}}{T_{oa}}$, and φ_b, these integrals may be represented in short by $I_1(\eta)$, $I_2(\eta)$, $I_3(\eta)$, and $I_4(\eta)$, respectively. These integrals have been evaluated on the bases of the error function velocity profiles for various parametric values of C_a^2, T_{ob}/T_{oa}, and φ_b (See tables I through V). Some of them are also presented in graphical form (See figures 3 through 5).

2.2.3 The Properties of the Jet Mixing Region Between Two Streams

Introducing the already defined auxiliary integrals

i) the dimensionless coordinate shift η_m is now given by

$$\eta_m = \eta_{R_a} - \frac{1}{1-\varphi_b}\left[I_2(\eta_{R_a}) - \varphi_b I_1(\eta_{R_a})\right] \qquad (12a)$$

(see Fig. 6)

ii) the jet boundary streamline will satisfy the condition

$$I_1(\eta_j) = \frac{I_1(\eta_{R_a}) - I_2(\eta_{R_a})}{1 - \varphi_b} \qquad (13a)$$

iii) The energy transfer from the main stream into the secondary stream across such a mixing region per unit width is

$$\Omega = \int_{y_j}^{y_{R_a}} \rho u C_p (T_{oa} - T_o)\, dy$$

Defining the energy transfer function

$$E = \frac{\Omega \sigma}{\rho_a u_a C_p T_{oa} x} \qquad (14)$$

one may now express

$$E = \int_{\eta_j}^{\eta_{R_a}} \frac{(1-C_a^2)(1-\Lambda)\varphi}{\Lambda - C_a^2 \varphi^2}\, d\eta$$

$$= \left[I_1(\eta_{R_a}) - I_1(\eta_j) - I_3(\eta_{R_a}) + I_3(\eta_j)\right] \qquad (15)$$

which can also be given as

$$E = \frac{(1 - \frac{T_{ob}}{T_{oa}})}{1 - \varphi_b}\left[I_2(\eta_j) - \varphi_b I_1(\eta_j)\right] \qquad (16)$$

after using the identity

$$I_3(\eta) \equiv \frac{1 - \frac{T_{ob}}{T_{oa}}}{1 - \varphi_b} I_2(\eta) + \frac{(\frac{T_{ob}}{T_{oa}} - \varphi_b)}{1 - \varphi_b} I_1(\eta)\,.$$

iv) From the definition of the Stanton Number

$$St = \frac{\Omega}{\rho_a u_a C_p (T_{oa} - T_{ob})\, x}$$

one may find that the Stanton Number for the jet mixing region* will satisfy the relation

$$St \cdot \sigma = \frac{E}{1 - \frac{T_{ob}}{T_{oa}}} = \frac{I_2(\eta_j) - \varphi_b I_1(\eta_j)}{1 - \varphi_b} \tag{17}$$

(See Fig. 7)

v) The shear stress along the jet boundary streamline will be of interest in determining the drag of a cavity where the secondary flow is to be considered representative of the induced wake flow. From the integral momentum relationship, it can be shown that

$$\tau_j = \frac{\rho_a u_a^2}{\sigma} \left[I_2(\eta_j) - \varphi_b I_1(\eta_j) \right] \tag{18}$$

With the definition of the friction coefficient

$$C_f = \frac{\tau}{\frac{\rho_a u_a^2}{2}}$$

one may evaluate the drag of the jet mixing region by

$$\frac{C_f \sigma}{2} = I_2(\eta_j) - \varphi_b I_1(\eta_j) \tag{19}$$

Comparing both equations (17) and (19), one observes

$$St = \frac{C_f}{2} \frac{1}{1 - \varphi_b} \tag{20}$$

as a modification of Reynold's Analogy for the two-stream jet mixing region.

vi) As the jet mixing between two streams usually occurs between a main stream and an induced secondary stream (e.g., for flow past cavities), the mechanical energy transferred across the streams has the direct control on the level of the induced secondary flow and has to be evaluated and considered in the

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* It should be stressed that this Stanton Number can not be interpreted to be the Stanton Number across the entire wake or the separated flow region. (See Ref. 8, 9, 12)

study of the separated flow problems. The net gain of mechanical energy by the secondary stream due to mixing is given by

$$\text{K.E.} = \int_{Y_{R_b}}^{y_j} \rho u \left(\frac{u^2}{2} - \frac{u_b^2}{2} \right) dy$$

Defining $E_m = \dfrac{\text{K.E.}\ \sigma}{\dfrac{\rho_a u_a^3}{2} x}$ to be the dimensionless mechanical energy transfer function, one obtains the relation

$$E_m = I_4(\eta_j) \qquad \text{(See Fig. 8)} \qquad (21)$$

vii) The vertical component of the entrainment velocity of the secondary flow is also of importance (it may contribute an additional amount of mass rate of flow due to the viscous effects such as occurring within an ejector system (Ref. 13)).

It is possible to obtain v_b from equation (10)(or equation (11)) for the present case of $\eta_p = 0$, since

$$\int_0^x \rho_b v_b \, dx = \rho_b v_b x$$

Defining $\varphi_b' = \dfrac{v_b}{u_a}$, it can be shown, after some manipulation that

$$\varphi_b' \sigma = I_1(\eta_j) \left(\frac{\dfrac{T_{ob}}{T_{oa}} - C_a^2 \varphi_b^2}{1 - C_a^2} \right) - \varphi_b \eta_m \qquad (22)$$

(See Fig. 9)

Conforming with the ordinary boundary layer concept, one may introduce a "displacement thickness δ_e^*" due to the entrainment effect which can be defined by

$$\rho_b u_b \delta_e^* = \rho_a u_a Y_{R_a} + \rho_b u_b (-Y_{R_b}) - \int_{Y_{R_b}}^{Y_{R_a}} \rho u \, dY \qquad (23)$$

so that

$$-\frac{\delta_e^*}{x} = \frac{v_b}{u_b} = \frac{\varphi_b'}{\varphi_b} \qquad (24)$$

since the right hand side of equation (23) is equal to $-\rho_b v_b x$ from the mass conservation principle. Combining equations

(22) and (24), one obtains the expression

$$-\sigma\frac{\delta_e^*}{x} = \frac{I_1(\eta_j)\left(\frac{T_{ob}}{T_{oa}} - C_a^2\varphi_b^2\right)}{(1-C_a^2)\varphi_b} - \eta_m \qquad (25)$$

(See Fig. 10)

viii) The flow structure within the turbulent two-stream jet mixing region.

It was suggested in Ref. (14) that the local kinematic, dynamic, dissipative, and thermodynamic structure within a fully developed jet mixing region between a main stream and the quiescent wake can be determined directly from the auxiliary integrals with the exception of a scale factor, namely the similarity parameter σ. A similar approach is followed here for deriving the results presenting the local structure within the two-stream jet mixing region, although detailed derivations have been omitted.

Following a particular streamline within a jet mixing region, the rate of change of its η coordinate value along the mixing region is given by

$$\frac{D\eta}{Dx} = -\frac{[I_1(\eta) - I_1(\eta_j)](\Lambda - C_a^2\varphi^2)}{x\varphi(1-C_a^2)} \qquad (26)$$

The turbulent shear stress for any point within the mixing region is expressed by the shear stress function

$$\Pi = \frac{\tau_t\sigma}{\rho_a u_a^2} = I_2(\eta) - \varphi[I_1(\eta) - I_1(\eta_j)] - \varphi_b I_1(\eta_j) \qquad (27)$$

(and the local Stanton Number is again related to the local friction coefficient through the modified Reynold's Analogy by

$$St_\ell \cdot \sigma = \frac{\Pi}{1-\varphi_b}\ )$$

One may also determine the eddy diffusivity distribution within the mixing region, given by

$$\epsilon = \frac{\varepsilon\sigma^2}{xu_a} = \frac{(\Lambda - C_a^2\varphi^2)}{1-C_a^2}\ \frac{\sqrt{\pi}\, e^{\eta^2}}{1-\varphi_b}\ [I_2(\eta) - \varphi(I_1(\eta) - I_1(\eta_j)) - \varphi_b I_1(\eta_j)] \qquad *(28)$$

* Note that the present method yields ε profiles which do not reflect the original assumption of Goertler, that $\varepsilon = \varepsilon(x)$ only.

The local shear work- and dissipation-functions may be evaluated with the help of equations (27) and (7a).

The time rate of dissipation of mechanical energy per unit cross-sectional area within the mixing region is given by

$$\Phi = \frac{\sigma \int_{y_{R_a}}^{y_{R_a}} (\tau_t \frac{\partial u}{\partial y})\, dy}{\rho_a u_a^3} = \frac{1}{2}\left[(I_2(\eta_{R_a}) - \varphi_b I_1(\eta_j))\right.$$

$$\left.(1-\varphi_b^2) - I_4(\eta_{R_a})\right] \qquad (29)$$

The velocity component v in the Y direction at any point within the jet mixing region (measured in the physical system of coordinates X, Y) is given by

$$\sigma\varphi'(\eta) = \sigma\frac{v}{u_a} = (\eta-\eta_m)\,\varphi - \frac{(\Lambda - C_a^2\,\varphi^2)[I_1(\eta)-I_1(\eta_j)]}{1-C_a^2} \qquad (30)$$

It is now obvious that within this coordinate system

$$\varphi'(\eta_{R_a}) = 0$$

$$\sigma\varphi'(\eta_j) = (\eta_j-\eta_m)\,\varphi_j$$

and therefore

$$\sigma\varphi'(\eta_{R_b}) = \frac{\frac{T_{ob}}{T_{oa}} - C_a^2\,\varphi_b^2}{1 - C_a^2}\, I_1(\eta_j) - \varphi_b\,\eta_m$$

as already given by equation (22).

2.2.4 The Similarity Parameter σ of the Mixing Region*

The similarity parameter, σ, originally introduced by Gortler (Ref. 1) has been well established to be twelve for the incompressible mixing between a uniform stream and a quiescent fluid (one stream mixing), but its dependence upon free stream Mach Number and stagnation temperature ratio, T_o/T_{oa}, are still subject to speculation despite the extensive work reported by Abramovich (Ref. 6).

Usually, one tends to correlate the σ value for the case of

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* This part of the consideration has been stimulated by discussions with Professor W. C. Reynolds at Stanford University.

two-stream mixing to that of the simpler case of a single stream (equivalent one-stream mixing case).

It has been suggested in Ref. (14) that the value of σ for turbulent jet mixing regions can best be related to the change in slope of the velocity profiles evaluated at certain reference point of the profiles (e.g., point of inflection). The following kinematic and thermodynamic considerations are emphasizing the importance of the region with highest levels of dissipative processes near or at the jet boundary.

Should one ride along the mixing region with the jet boundary stream line, one would observe a certain rate of change of the velocity profile slope which is a function of time. It is stipulated that such time dependent rate of change shall be the same whether it is a case of one-stream (with subscript I) or two-stream (with subscript II) mixing. On the basis of this consideration, one may write

$$\frac{D}{Dt}\left[\left(\frac{\partial u}{\partial y}\right)_j\right]_I = f(t) = \frac{D}{Dt}\left[\left(\frac{\partial u}{\partial y}\right)\right]_{II} \tag{31}$$

which may be expanded into

$$\left[u_j \cdot \frac{\partial}{\partial x}\left(\frac{\partial u}{\partial y}\right)_j\right]_I = \left[u_j \cdot \frac{\partial}{\partial x}\left(\frac{\partial u}{\partial y}\right)_j\right]_{II}$$

Adopting equation (7a) as the velocity profile for the jet mixing regions and making use of the relations

$$x_I = u_{j_I}\, t$$

$$x_{II} = u_{j_{II}}\, t$$

one obtains the relationship

$$\frac{\sigma_{II}}{\sigma_I} = \frac{1}{1-\varphi_b}\,\frac{\varphi_{j_{II}}}{\varphi_{j_I}}\,\frac{e^{-\eta_{j_I}^2}}{e^{-\eta_{j_{II}}^2}} \tag{32}$$

Defining a reference Mach Number associated with the mixing region to be $M_j = \frac{u_a - u_b}{C_j}$ the "equivalent case of one-stream mixing case" is stipulated as having the same static temperature ratio across the mixing region and having the same reference Mach Number at the j streamline. Thus one obtains the relation

$$\frac{C_{a_{II}}(1-\varphi_b)}{\sqrt{\Lambda_{j_{II}} - C_{a_{II}}^2 \varphi_{j_{II}}^2}} = \frac{C_{a_I}}{\sqrt{\Lambda_{j_I} - C_{a_I}^2 \varphi_{j_I}^2}} \tag{33}$$

where

$$\Lambda_j = \varphi_{j_I} + (1 - \varphi_{j_I}) \left(\frac{T_b}{T_{oa}}\right)_I$$

and

$$\left(\frac{T_b}{T_{oa}}\right)_I = (1-C_{a_I}^2) \frac{\left(\frac{T_{ob}}{T_{oa}} - C_{a_{II}}^2 - \varphi_b^2\right)}{1 - C_{a_{II}}^2}$$

Introducing the approximations of

$$\varphi_{j_I} = \frac{1}{2}$$

$$\varphi_{j_{II}} = \frac{1 + \varphi_b}{2}$$

$$e^{-\eta_{j_I}^2} = e^{-\eta_{j_{II}}^2} = 1$$

equation (33) becomes

$$\frac{\sigma_{II}}{\sigma_I} = \frac{1 + \varphi_b}{1 - \varphi_b}$$

and the free-stream Crocco Number of the "equivalent one-stream mixing case", $C_{a_I}^2$, may be found from equation (33) which yields, after some manipulation,

$$C_{a_I}^2 = \frac{C_{a_{II}}^2 (1-\varphi_b)^2}{C_{a_{II}}^2 (1-\varphi_b)^2 + (1-C_{a_{II}}^2)} \tag{34}$$

It is noteworthy that this correlation does not involve $\frac{T_{ob}}{T_{oa}}$ explicitly.

On the other side, the value of σ_I will be influenced by both the compressibility ($C_{a_I}^2$) and the stagnation temperature ratio. On

account of these considerations, one may now express

$$\sigma_{II}\left(C_{a_{II}}{}^2,\ \frac{T_{ob}}{T_{oa}},\ \varphi_b\right) = \sigma_I\left(C_{a_I}{}^2,\ \frac{T_b}{T_{oa}}\right)\ \frac{\sigma_{II}}{\sigma_I}(\varphi_b)$$

where the determination of the "equivalent one-stream mixing" Crocco Number, $C_{a_I}{}^2$, according to Eqn. (34) is facilitated by using the graphical presentation, Fig. 11. As has been pointed out before, for the case of single stream, little reliable information is available in the literature (Ref. 6) although continued efforts (Ref. 7, 15, 16, 17) are indicative of the significance of the problem. Until more information becomes available, it is proposed here that σ_I be evaluated on the empirical relation

$$\sigma_I = 12 + 2.758\ M_{a_I} = 12 + 2.758\ C_{a_I} / \sqrt{(1-C_{a_I}{}^2)\ \frac{k-1}{2}} \qquad (35)$$

to take account of the compressibility effect only.

2.3 Interpretation of the effects of initial disturbances -- . Equivalent Bleed Concept

2.3.1 Mass Bleed Relation -- Restricted Case

Attention is being directed temporarily to the wake or separated flow region as a whole, e.g., in the flow past cavities (see Fig. 12).

In the event that a certain (small) rate of fluid mass G_B is bled into the cavity region, and from the principle of the mass conservation for this region, one should arrive at the conclusion that there exists a "discriminating" streamline, identified by d, within the mixing region, which will stagnate at the point of re-attachment R. This d streamline is related to the jet boundary streamline j by the continuity equation according to

$$\frac{G_B \sigma}{\rho_a u_a x} = I_1(\eta_j) - I_1(\eta_d) \qquad (36)$$

where the integrals I_1 are to be evaluated under the restricted condition (the case with no initial disturbance). It is understood that the bleed rate should be so small that it will not distort the velocity profile within the jet mixing region and, also, will not change the free stream conditions.

Combining equations (13a) and (36), one obtains

$$I_1(\eta_d) = \frac{I_1(\eta_{R_a}) - I_2(\eta_{R_a}) - \dfrac{\sigma G_B (1-\varphi_b)}{\rho_a u_a x}}{1 - \varphi_b} \tag{37}$$

2.3.2 Equivalent Bleed Concept

We now take advantage of the fact that the shapes of the flow profiles are not strongly affected by the initial disturbances due to thin approaching boundary layer (Ref. 7) as the latter causes a shift of the profiles rather than a distortion. Hence, the momentum integral method can be applied to the case with mass bleed and initial disturbances in the same way as it has been used for mass bleed alone. As $f(\psi) \to 1$ and $\eta_p = 1/2\sqrt{\xi}$ now approaches $\eta_p \to \sigma \delta_a/x$, considering the initial disturbances but restricting at this time to the case of no bleed, the momentum equation (12) takes the form

$$\eta_m = \eta_{R_a} - \frac{1}{1-\varphi_b}\left[(1-C_a^2)\left(\int_{\eta_{R_b}}^{\eta_{R_a}} \frac{\varphi^2}{\Lambda - C_a^2 \varphi^2}\, d\eta - \varphi_b \int_{\eta_{R_b}}^{\eta_{R_a}} \frac{\varphi}{\Lambda - C_a^2 \varphi^2}\, d\eta\right)\right.$$

$$\left. + \sigma\left(\frac{\rho_b}{\rho_a}\varphi_b^2 \frac{\theta_b}{x} + \frac{\theta_a}{x} + \frac{\delta_a^*}{x}(1-\varphi_b)\right)\right] \tag{38}$$

and, since the shape of the profiles $\varphi(\eta)$ and $\frac{\rho}{\rho_a}(\eta)$ remains unchanged (except for a shift in the y direction), we may utilize the integrals tabulated for similarity profiles , and Eqn. (38) may be written as

$$\eta_m = \eta_{R_a} - \frac{1}{1-\varphi_b}\left[I_2(\eta_{R_a}) - \varphi_b I_1(\eta_{R_a}) + \sigma\left(\Delta b + \Delta a + \frac{\delta_a^*}{x}(1-\varphi_b)\right)\right] \tag{12b}$$

where

$$\Delta b = \frac{\rho_b}{\rho_a}\varphi_b^2 \frac{\theta_b}{x}$$

$$\Delta a = \frac{\theta_a}{x}$$

have been introduced for convenience. Making use of equation (12b), the right side of the equation (13) becomes

$$\eta_{R_a} - \eta_p \frac{\delta_a^*}{\delta_a} - \eta_m = \frac{1}{1-\varphi_b}\left\{I_2(\eta_{R_a}) - \varphi_b I_1(\eta_{R_a}) + \sigma(\Delta b + \Delta a)\right\}$$

and the left hand side of the equation (13) can be written as

$$\int_{\eta_d}^{\eta_{R_a}} \frac{(1-C_a^2)\,\varphi}{\Lambda - C_a^2\,\varphi^2}\, d\eta = I_1(\eta_{R_a}) - I_1(\eta_d)$$

where it is understood that the actual jet boundary streamline for this case (with initial disturbances) assumes the value of η_d of the fully developed velocity profile*. Equation (13) now becomes

$$I_1(\eta_d) = \frac{1}{1-\varphi_b}\left[I_1(\eta_{R_a}) - I_2(\eta_{R_a}) - \sigma(\Delta b+\Delta a)\right] \qquad (13b)$$

where all integrals are to be evaluated under restricted conditions (similarity profiles).

In comparison of the equations (37) and (13b), one would recognize that the terms $\Delta a + \Delta b$ in equation (13b) present themselves in the same way as the mass bleed term in equation (37). One may conclude that, within the limitations of the assumption made within this section, the effect of the initial disturbances is equivalent to mass bleeding into the wake region.

Generalizing to cases where both mass bleed and initial disturbances are present, one would expect that the relation expressed by equation (13b) will now be given as

$$I_1(\eta_d) = \frac{1}{1-\varphi_b}\left[I_1(\eta_{R_a}) - I_2(\eta_{R_a}) - \sigma\left(\Delta a + \Delta b + \frac{G_B(1-\varphi_b)}{\rho_a u_a x}\right)\right] \qquad (13c)$$

This relation will also be useful, e.g., in the study of the effect of initial boundary layers and mass bleed on base pressure problems.

It should be mentioned that the presence of the initial disturbances and mass bleeding will exert their corresponding influences in the energy transfer across such mixing regions. These effects are necessarily included in the overall system (wake) analysis, and the detailed formulation on the aspects of the energy transfer is included in the forthcoming technical report (Ref. 12).

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* Note that the use of η_j shall remain restricted to cases consistent with the applicability of Eqn. (13a).

3. RESULTS OF NUMERICAL CALCULATIONS

Numerical calculations for the "restricted case" were originally carried out on the Illiac* for three values of the stagnation temperature ratio (T_{ob}/T_{oa} + 0.5, 1.0, 2.0), four values of the secondary velocity ratio (φ_b = 0, 0.2, 0.4, 0.6), and four values of the primary stream Crocco Number (C_a^2 = 0, 0.2, 0.4, 0.6). For better orientation concerning the general trends of influencing parameters, graphical presentations for these results are included from Fig. 3 to Fig. 10.

Since the Illiac was out of service at the end of 1962, calculating programs have been developed for IBM 7094 system, and the range of the stagnation temperature ratio has been extended to include cases of T_{ob}/T_{oa} = 0.1 and 10. Also, cases with C_a^2 = 0.8 and 0.9 have been added. The presentation of numerical results in form of tables was found to be more useful inasmuch as better accuracy for calculations can be achieved. Tables I to V are direct printouts from the IBM 7094 system.

To facilitate the use of tables, the correspondence of notations between the text of this report and the table is given as follows:

Text	$\frac{T_{ob}}{T_{oa}}$	C_a^2	φ_b	η	φ	$I_1(\eta)$	$I_2(\eta)$
Table	TOB/TOA	C_A^2	PHI B	ETA	PHI	I_1(ETA)	I_2(ETA)

Text	$I_3(\eta)$	$I_4(\eta)$	η_j	φ_j	$I_1(\eta_j)$	$I_2(\eta_j)$
Table	I_3(ETA)	I_4(ETA)	ETA J	PHI J	I_1(ETA J)	I_2(ETA J)

Text	$I_3(\eta_j)$	$I_4(\eta_j)$	η_m	$\sigma \cdot St$
Table	I_3(ETA J)	I_4(ETA J)	ETA M	(SIGMA)X(STANTON NO.)

Text	$\sigma\frac{v_b}{u_a}$**
Table	(SIGMA)X(V_B/U_A)

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* Electronic Digital Computer, Engineering Research Laboratory, University of Illinois, Urbana, Illinois

** The previous results on $\sigma\frac{v_b}{u_a}$ and the distribution of the vertical component of the velocity for the single stream case was incorrectly presented in Fig. 5b and 5c in Ref. 14. The correct information on those flow properties can easily be obtained from the tables presented herein.

No attempt has been made to present various properties related to the local structure of the jet mixing region, although it may be extracted from the information presented herein.

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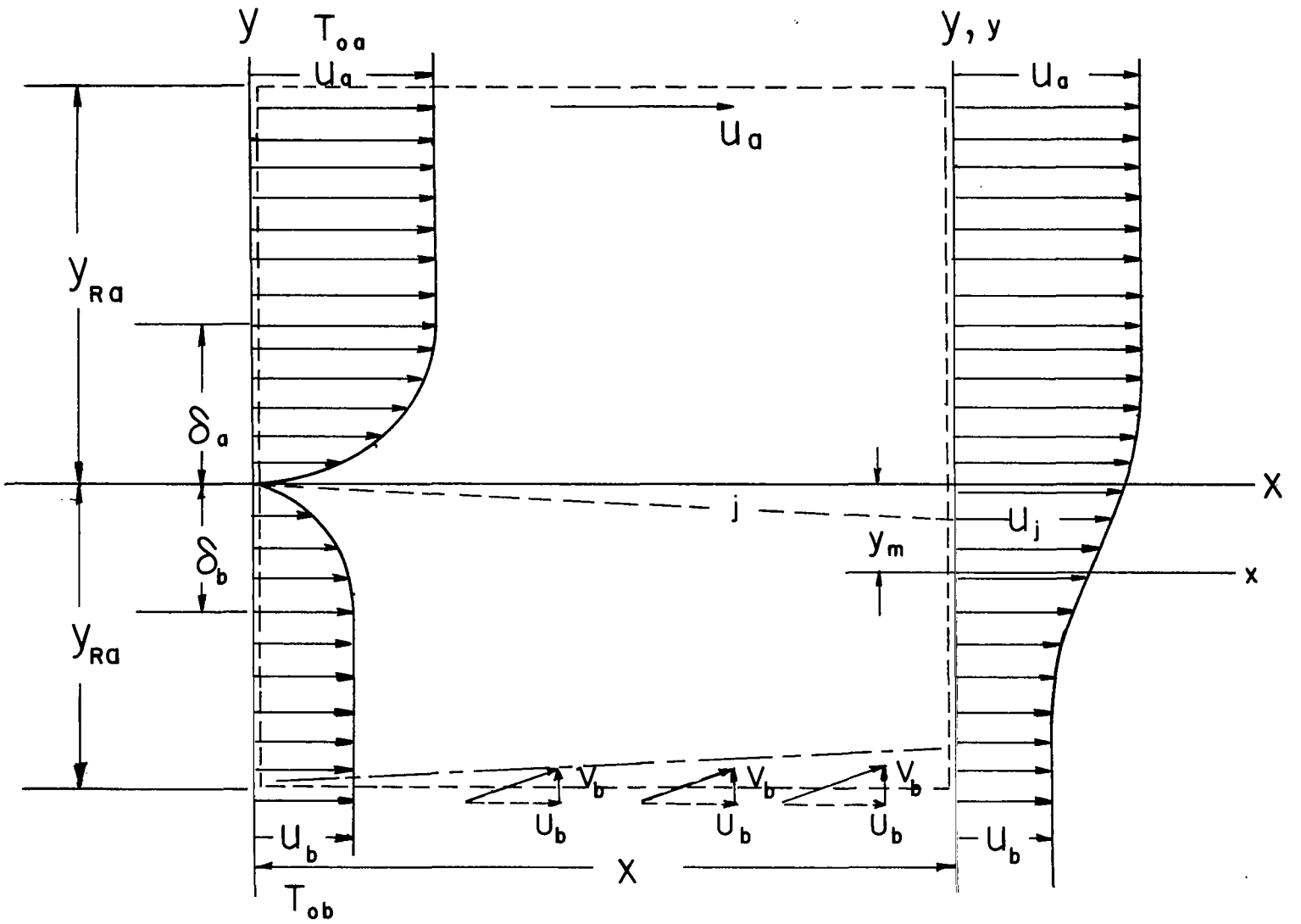

Fig. 1. The Jet Mixing Region

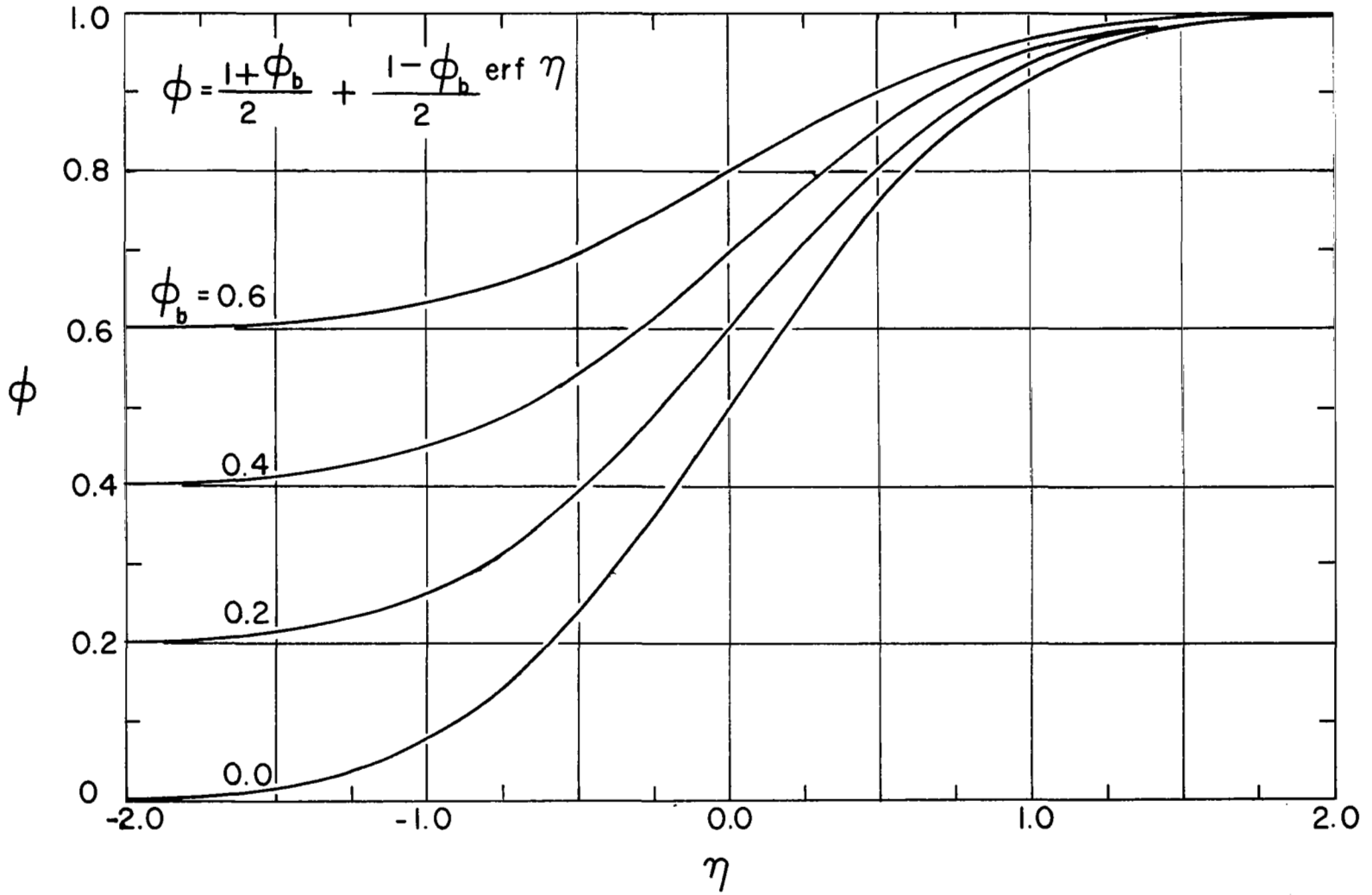

Fig. 2. The Velocity Profile (Restricted Case)

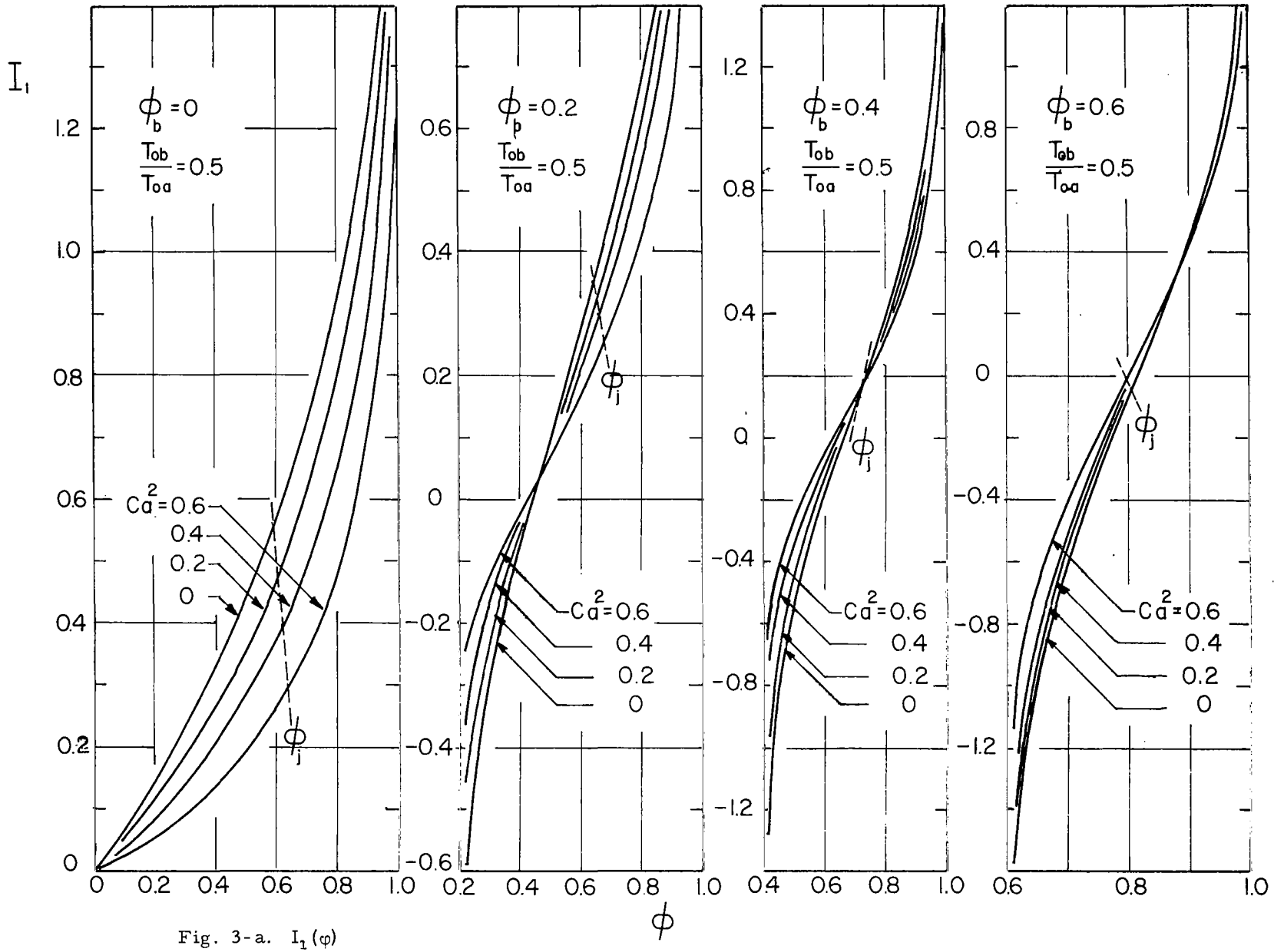

Fig. 3-a. $I_1(\varphi)$

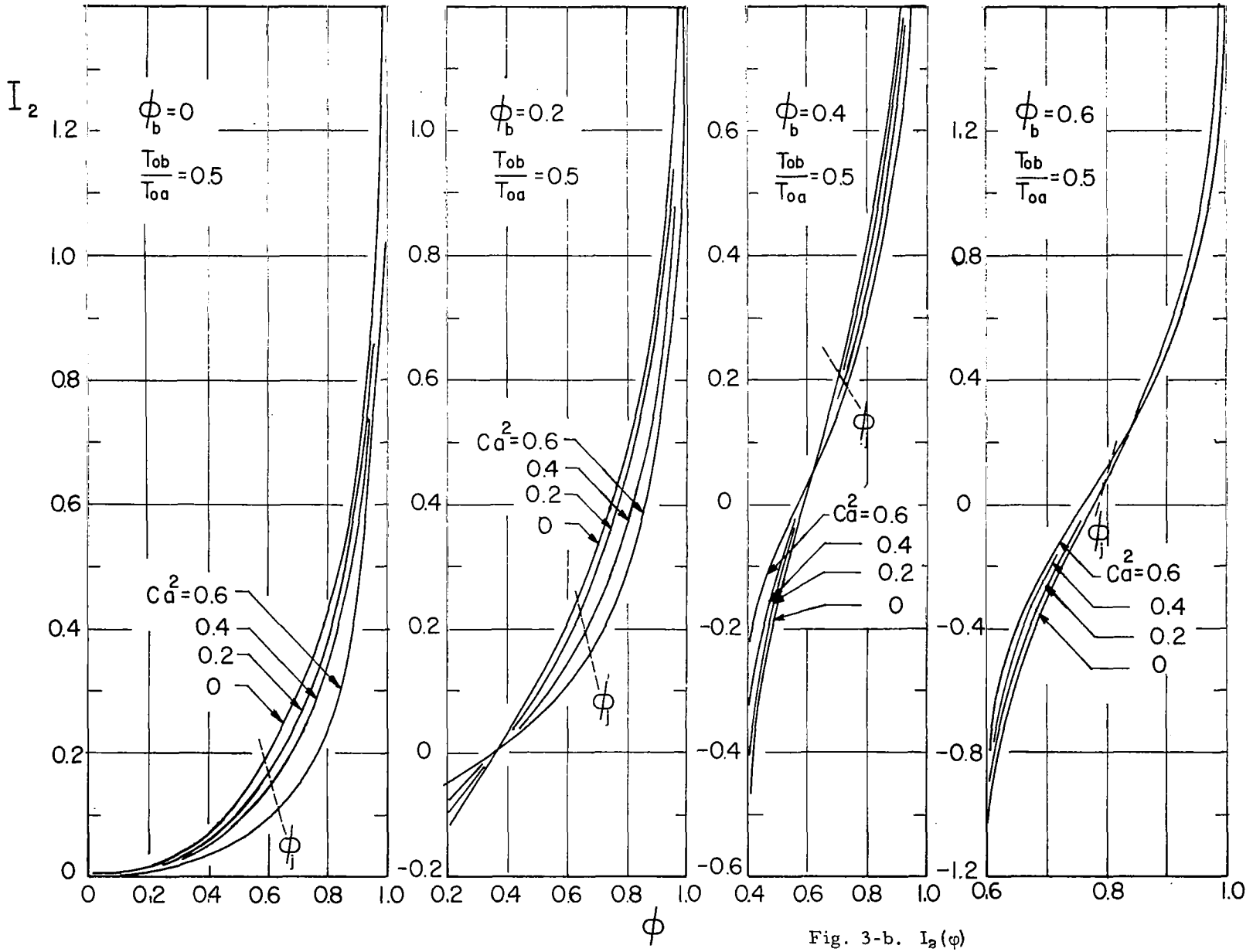

Fig. 3-b. $I_2(\varphi)$

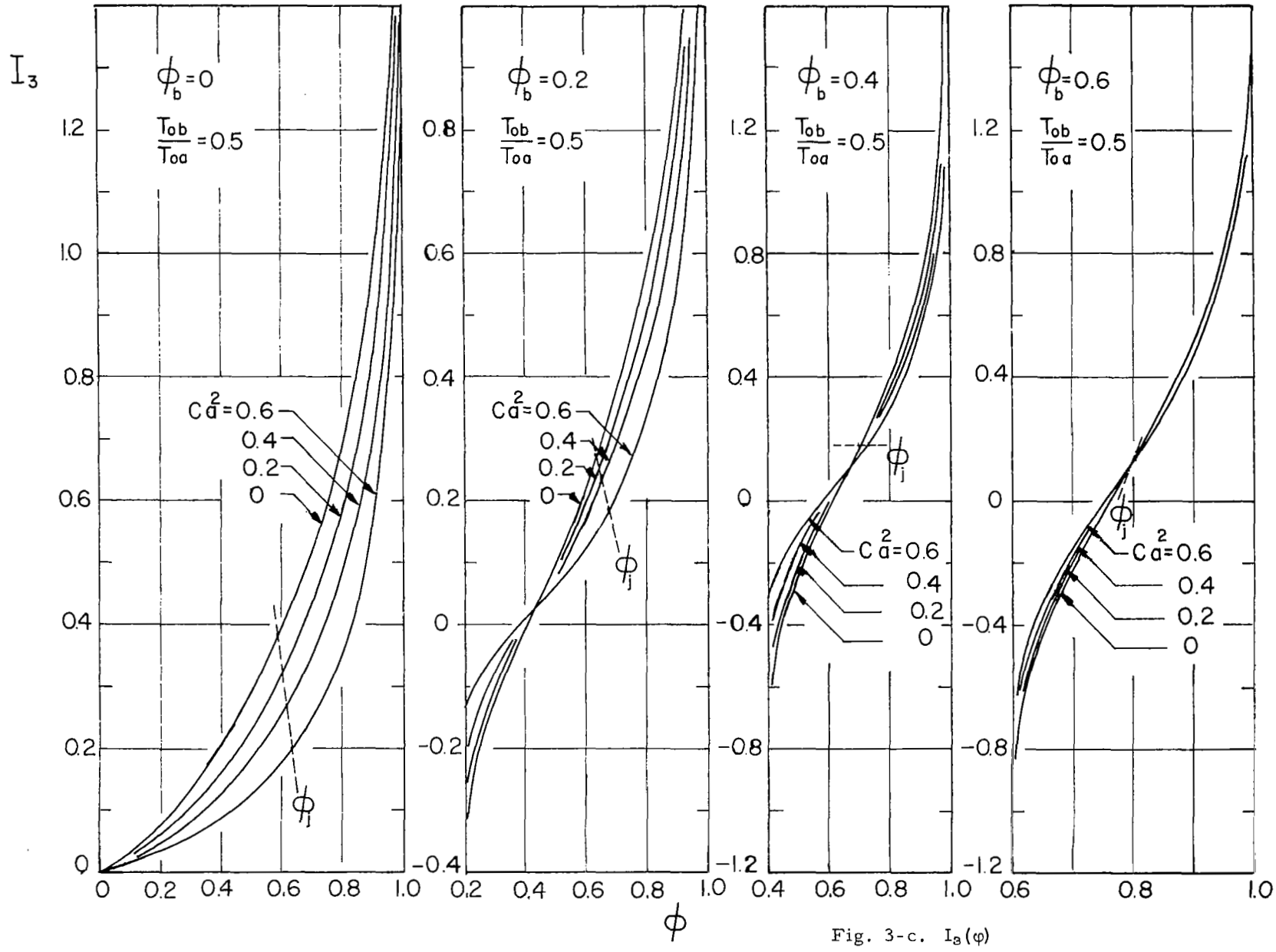

Fig. 3-c. $I_3(\varphi)$

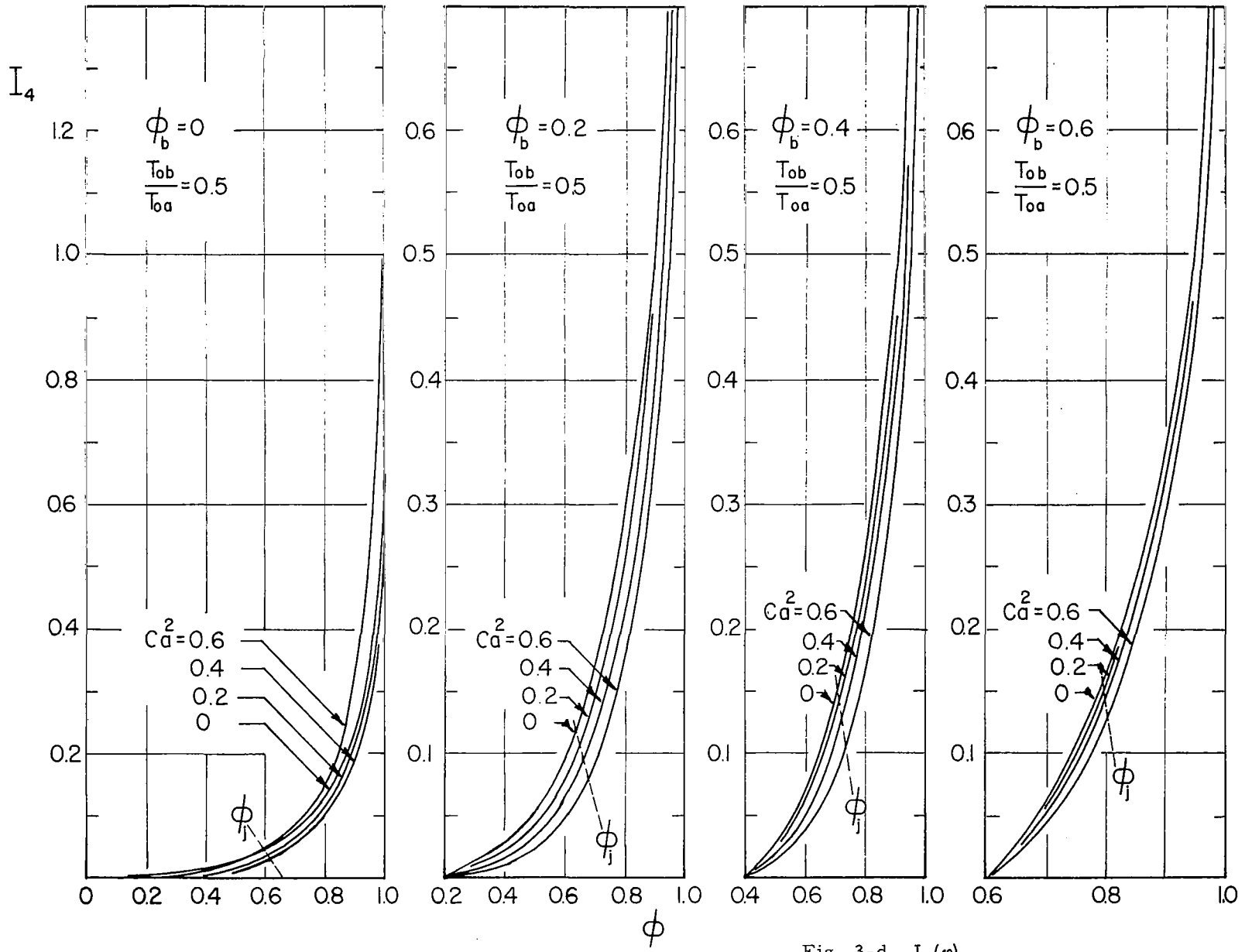

Fig. 3-d. $I_4(\varphi)$

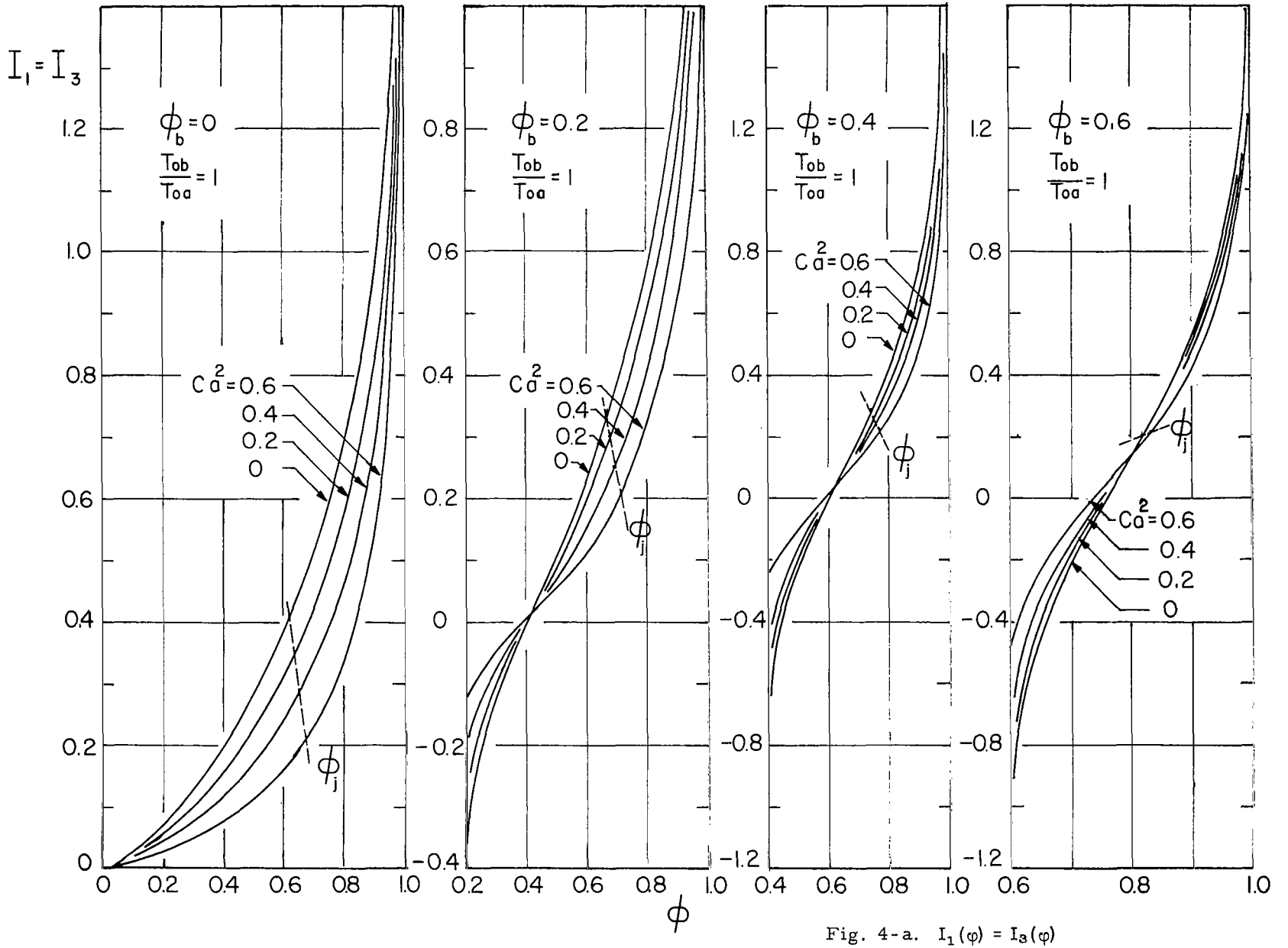

Fig. 4-a. $I_1(\varphi) = I_3(\varphi)$

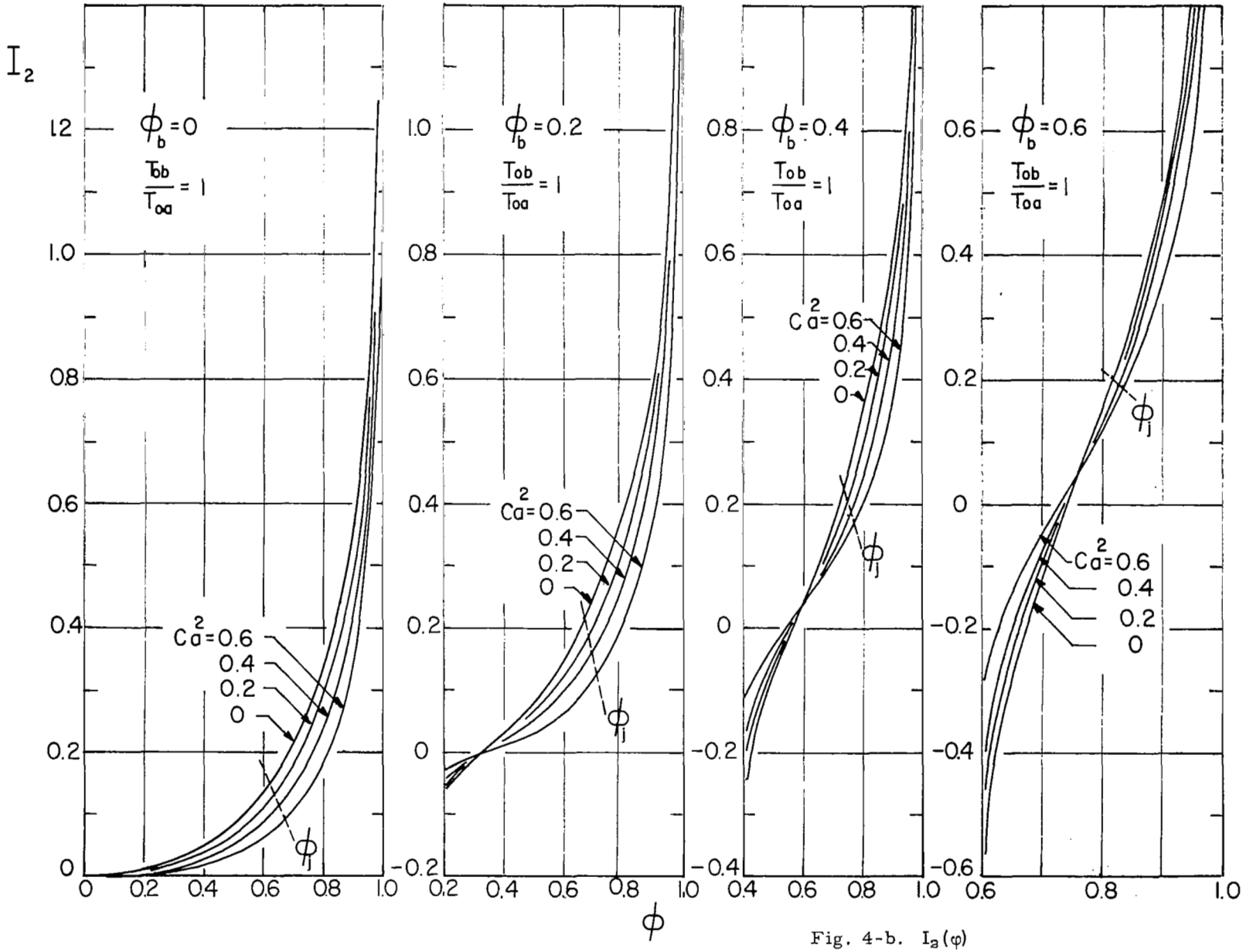

Fig. 4-b. $I_a(\varphi)$

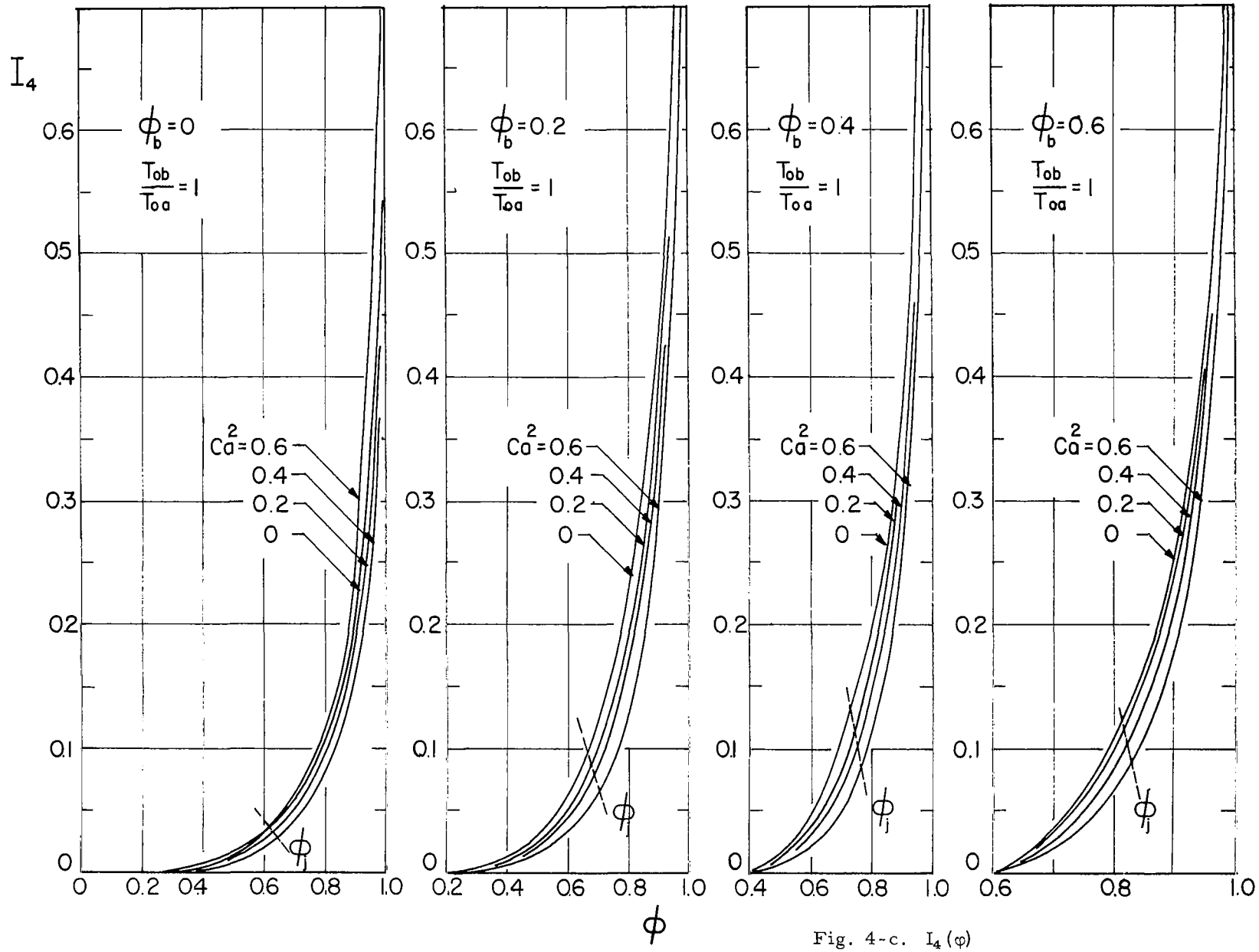

Fig. 4-c. $I_4(\varphi)$

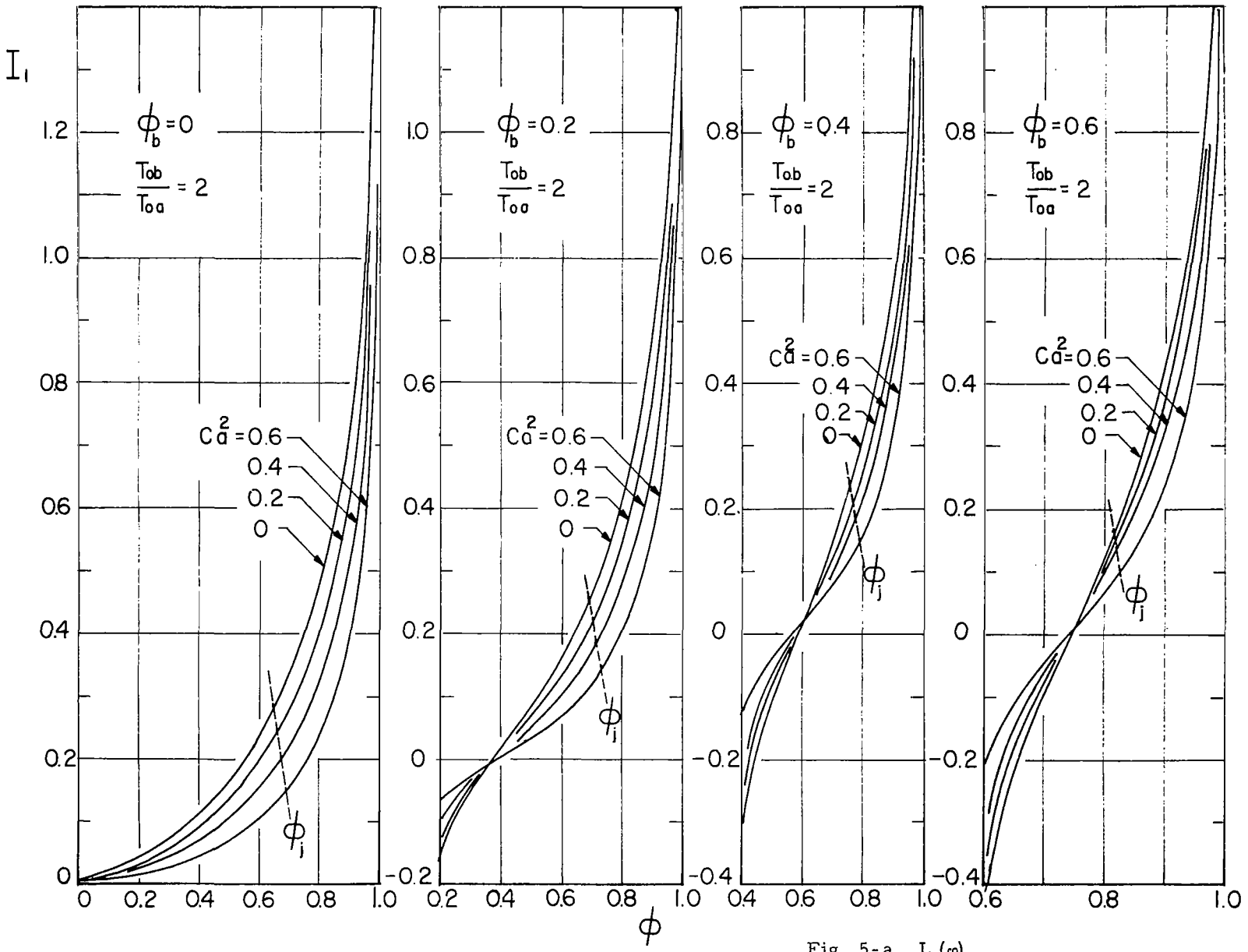

Fig. 5-a. $I_1(\varphi)$

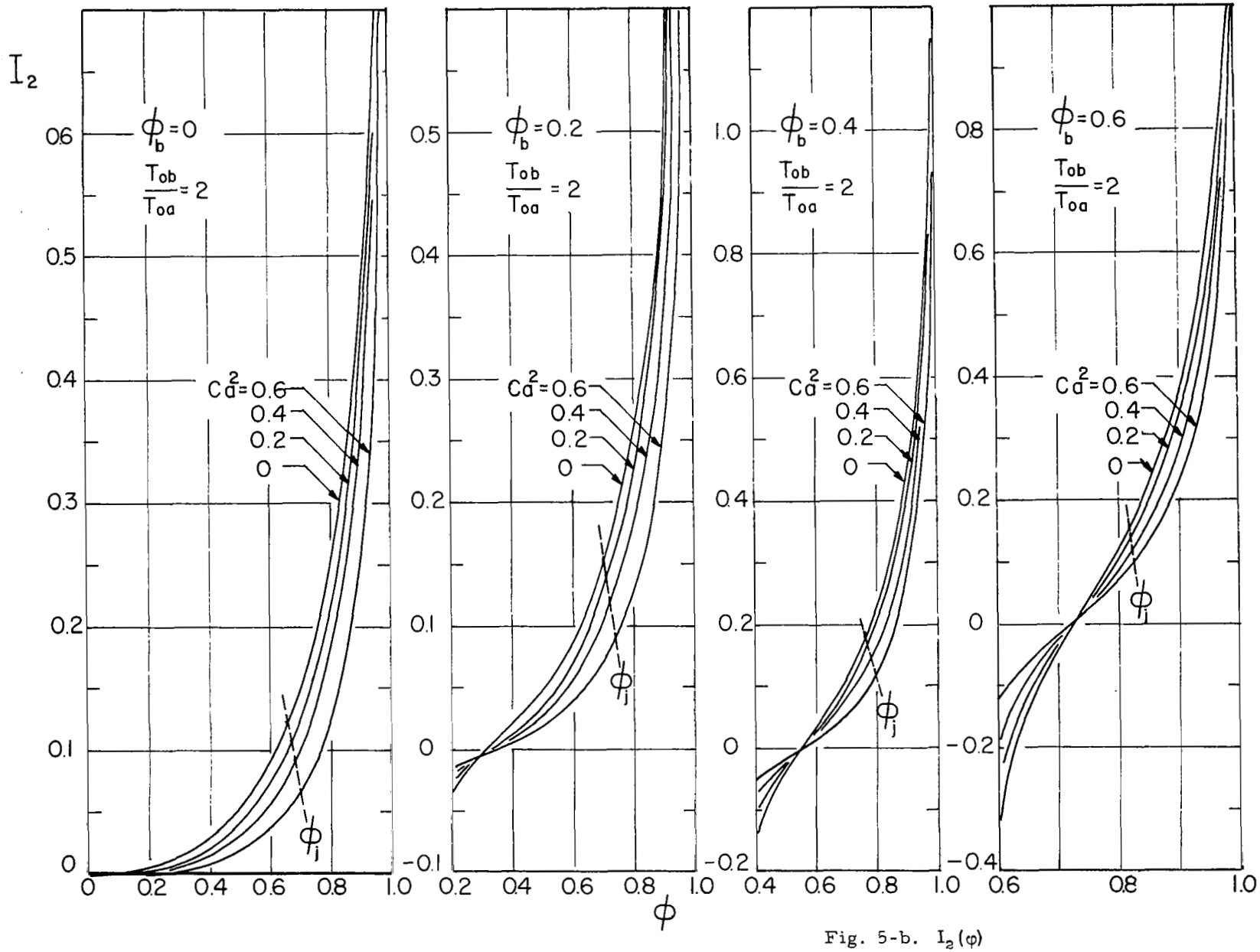

Fig. 5-b. $I_2(\varphi)$

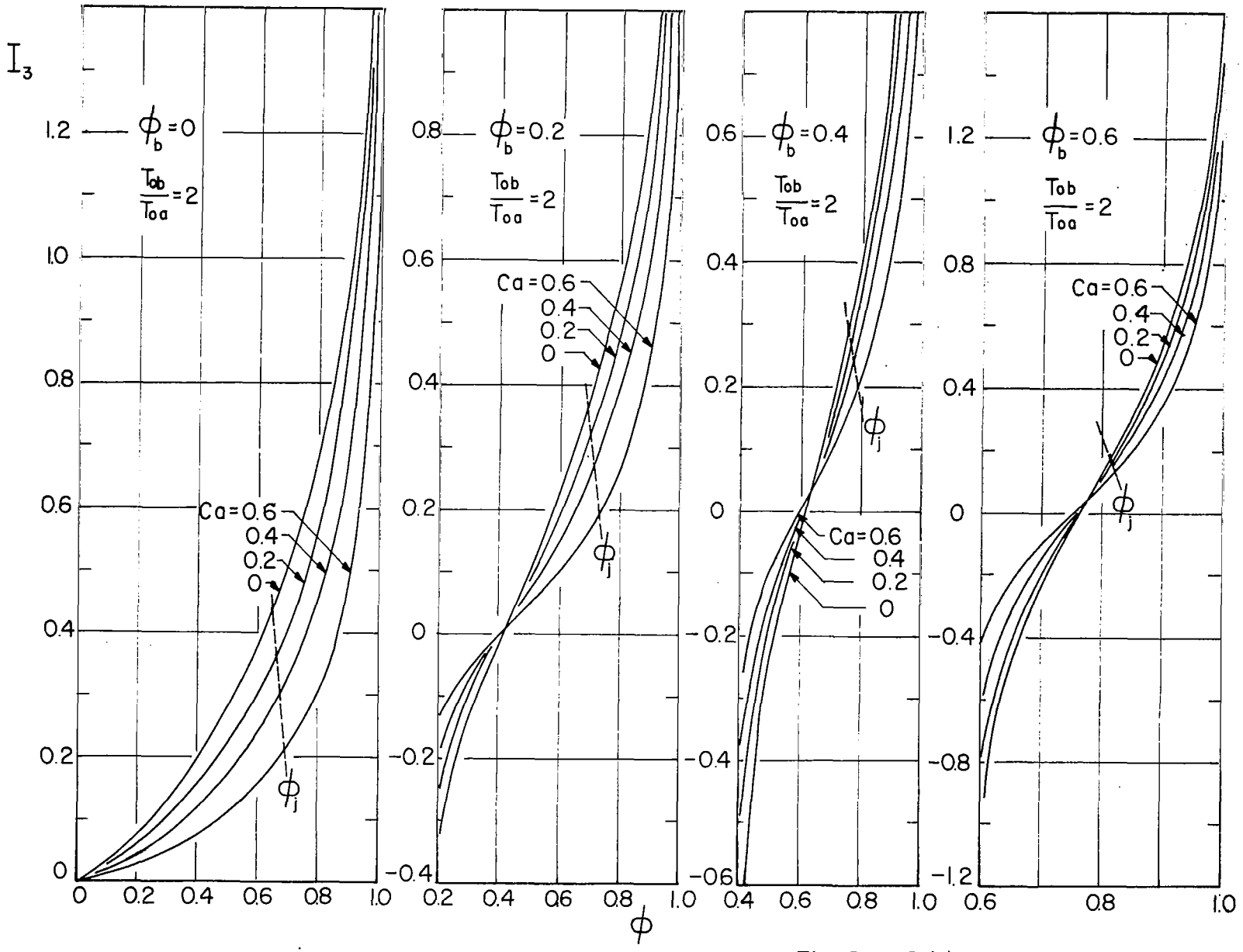

Fig. 5-c. $I_3(\varphi)$

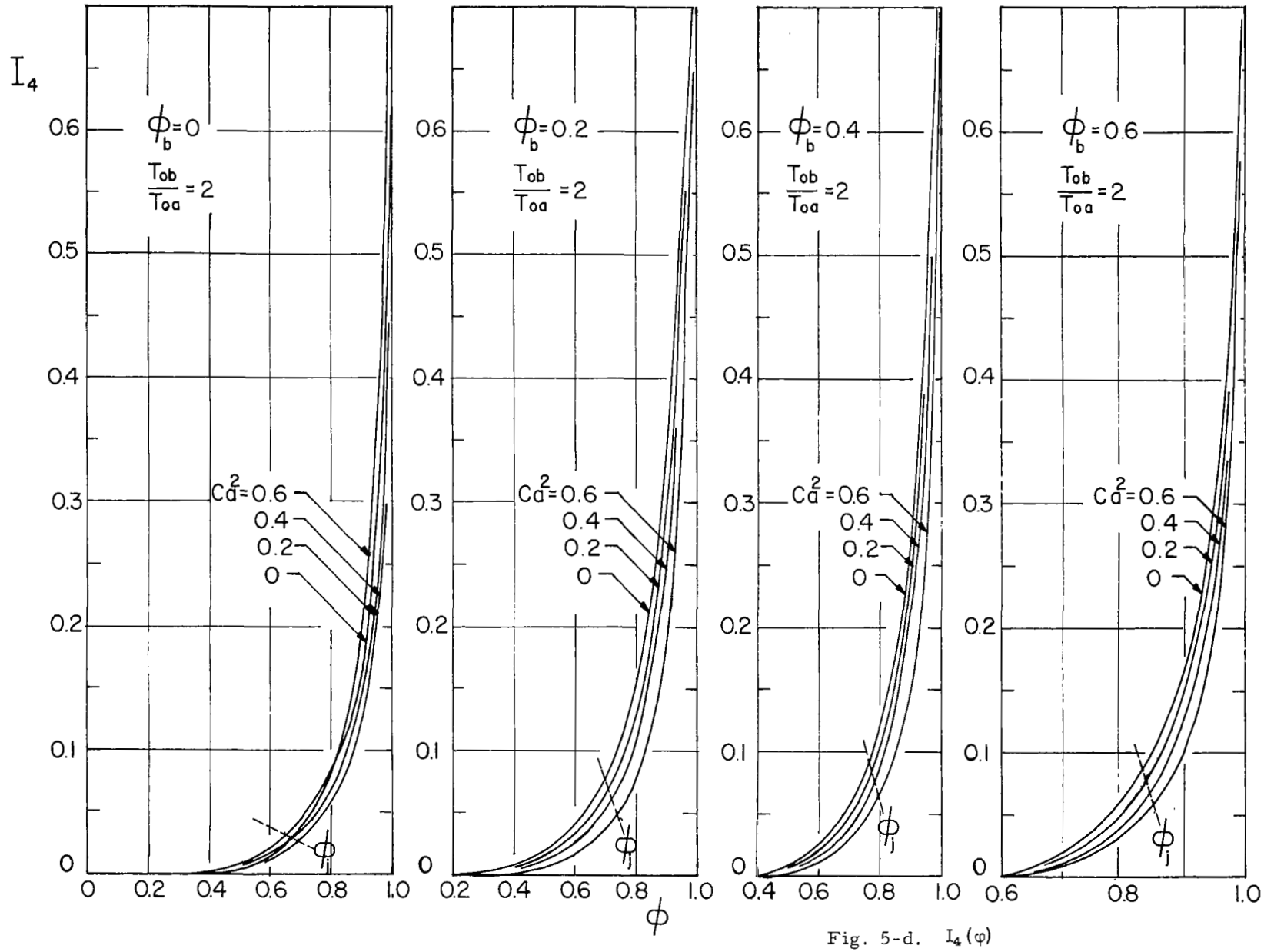

Fig. 5-d. $I_4(\varphi)$

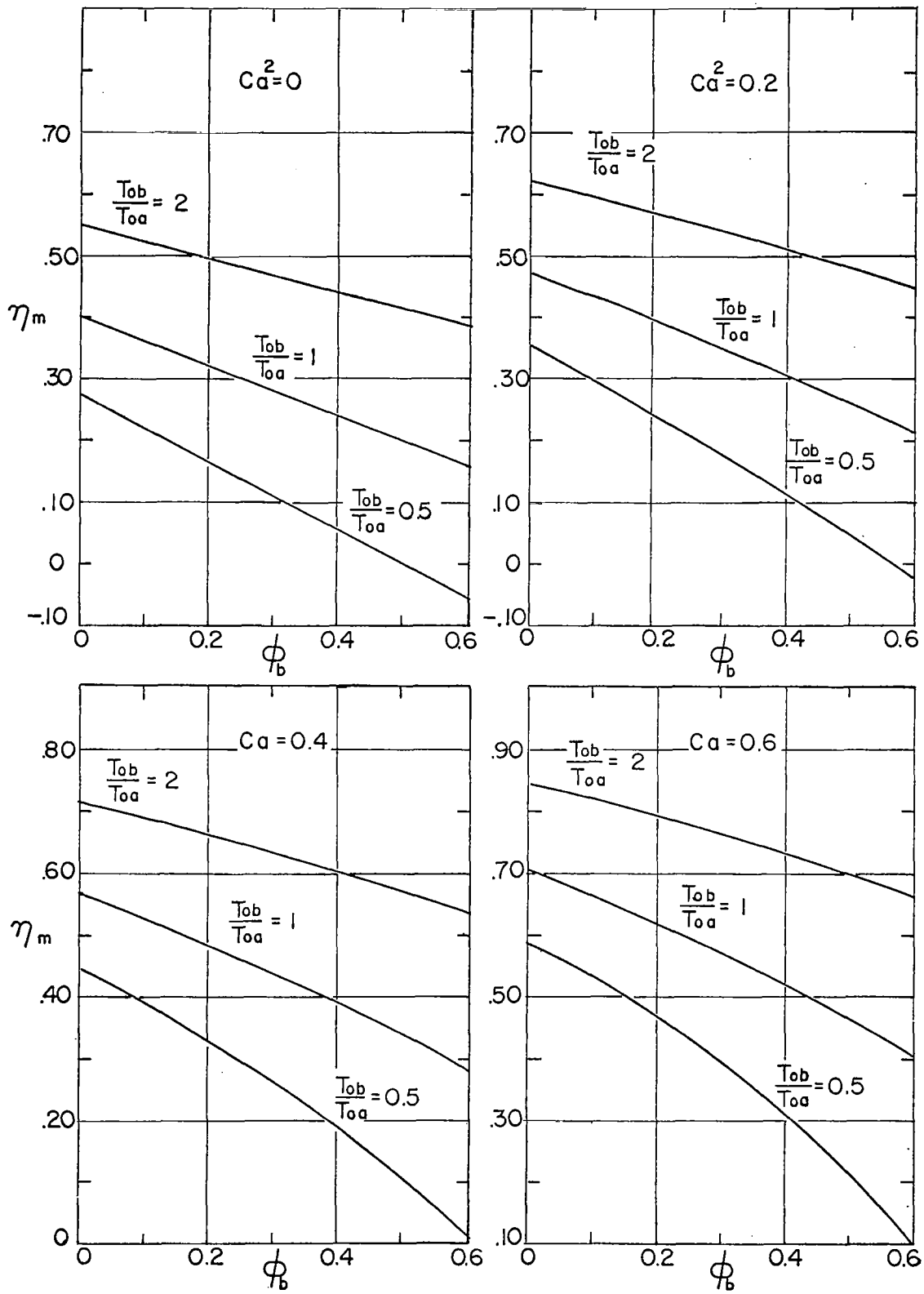

Fig. 6 $\eta_m(\phi_b, Ca^2, \frac{T_{ob}}{T_{oa}})$

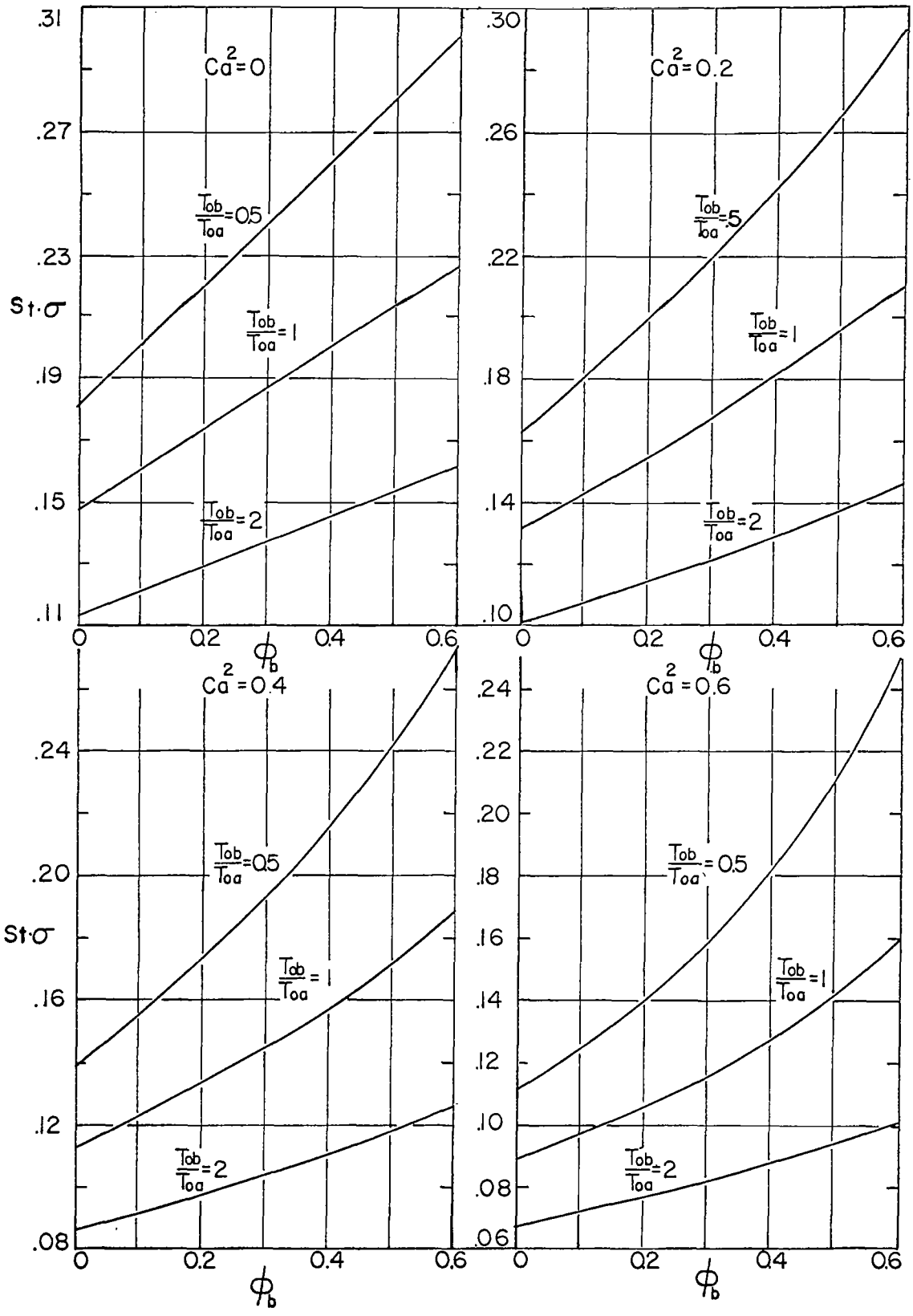

Fig. 7. St · σ (φ_b, C_a^2, $\frac{T_{ob}}{T_{oa}}$)

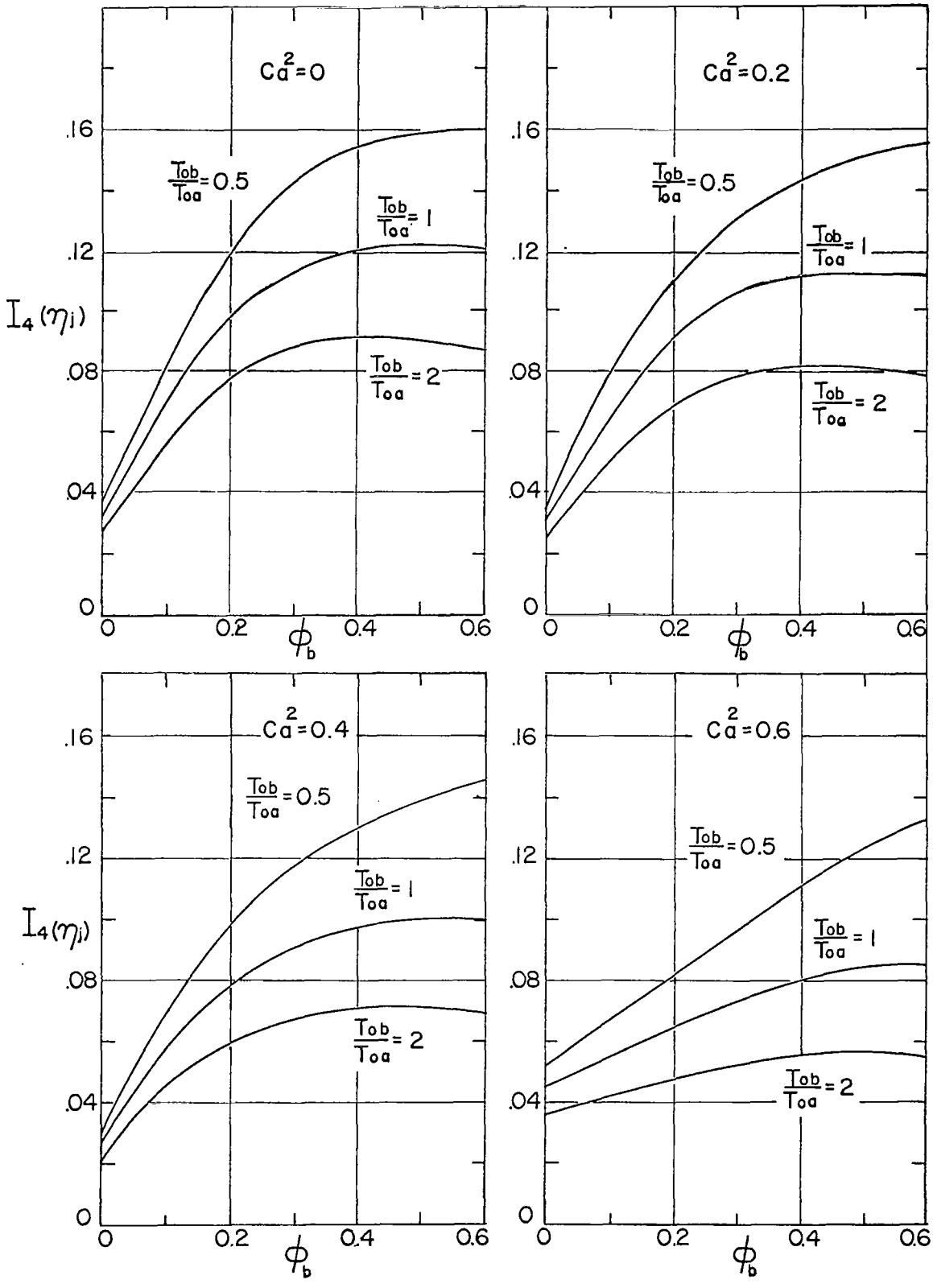

Fig. 8. $E_m = I_4(\eta_j)$

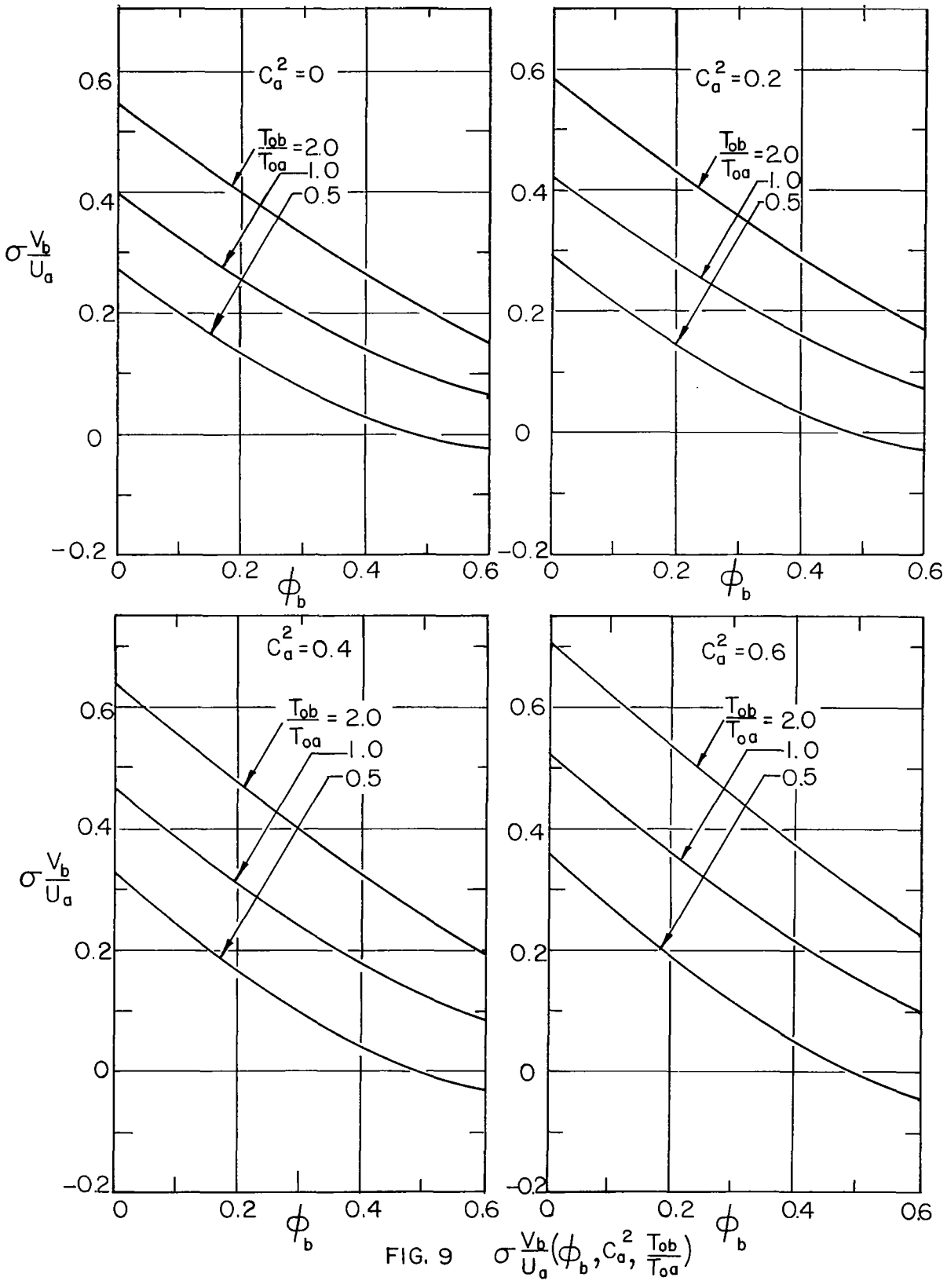

FIG. 9 $\sigma \frac{V_b}{U_a}(\phi_b, C_a^2, \frac{T_{ob}}{T_{oa}})$

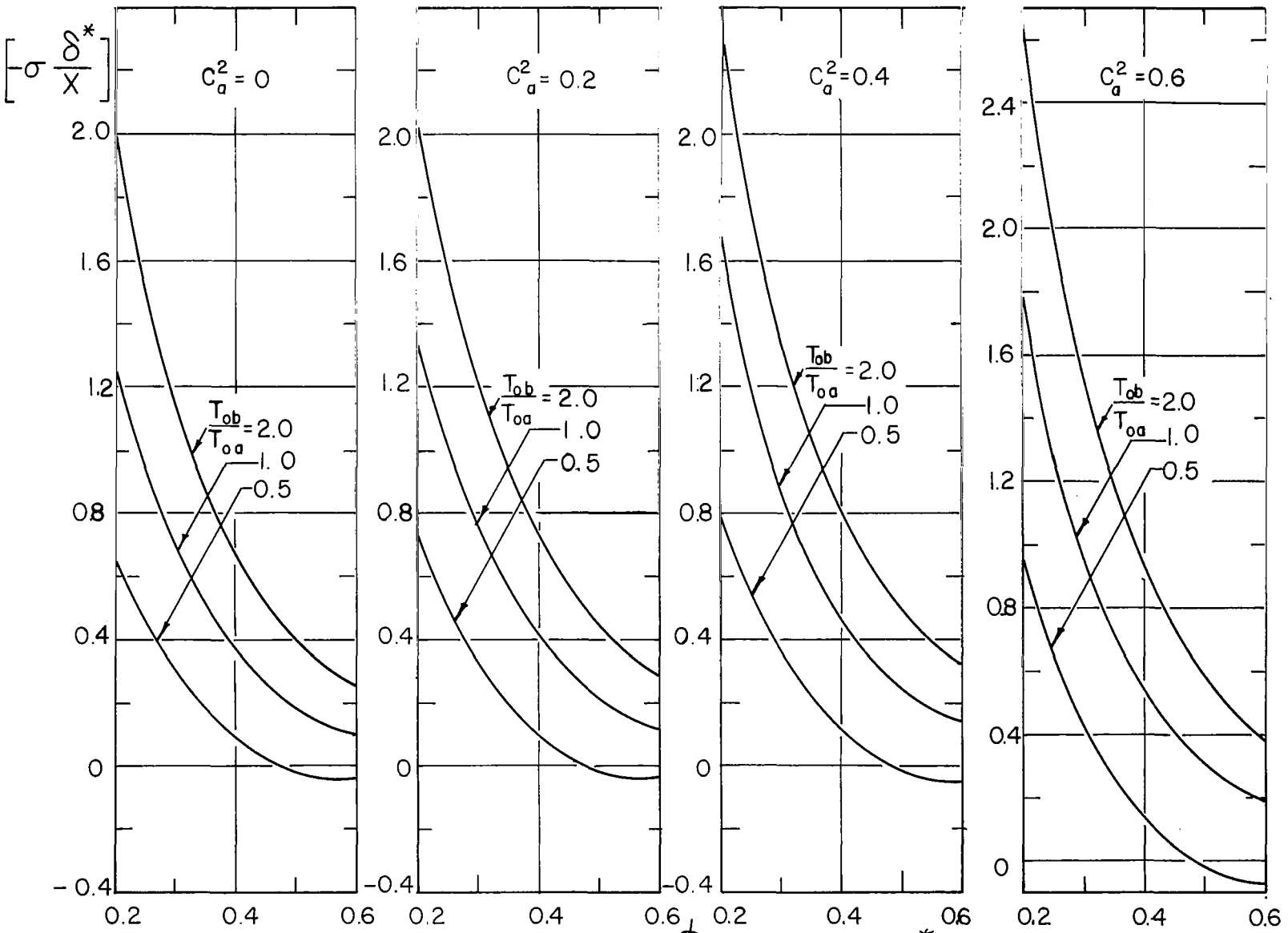

FIG. 10 $-\sigma\frac{\delta^*}{X}(\phi_b, C_a^2, \frac{T_{ob}}{T_{oa}})$

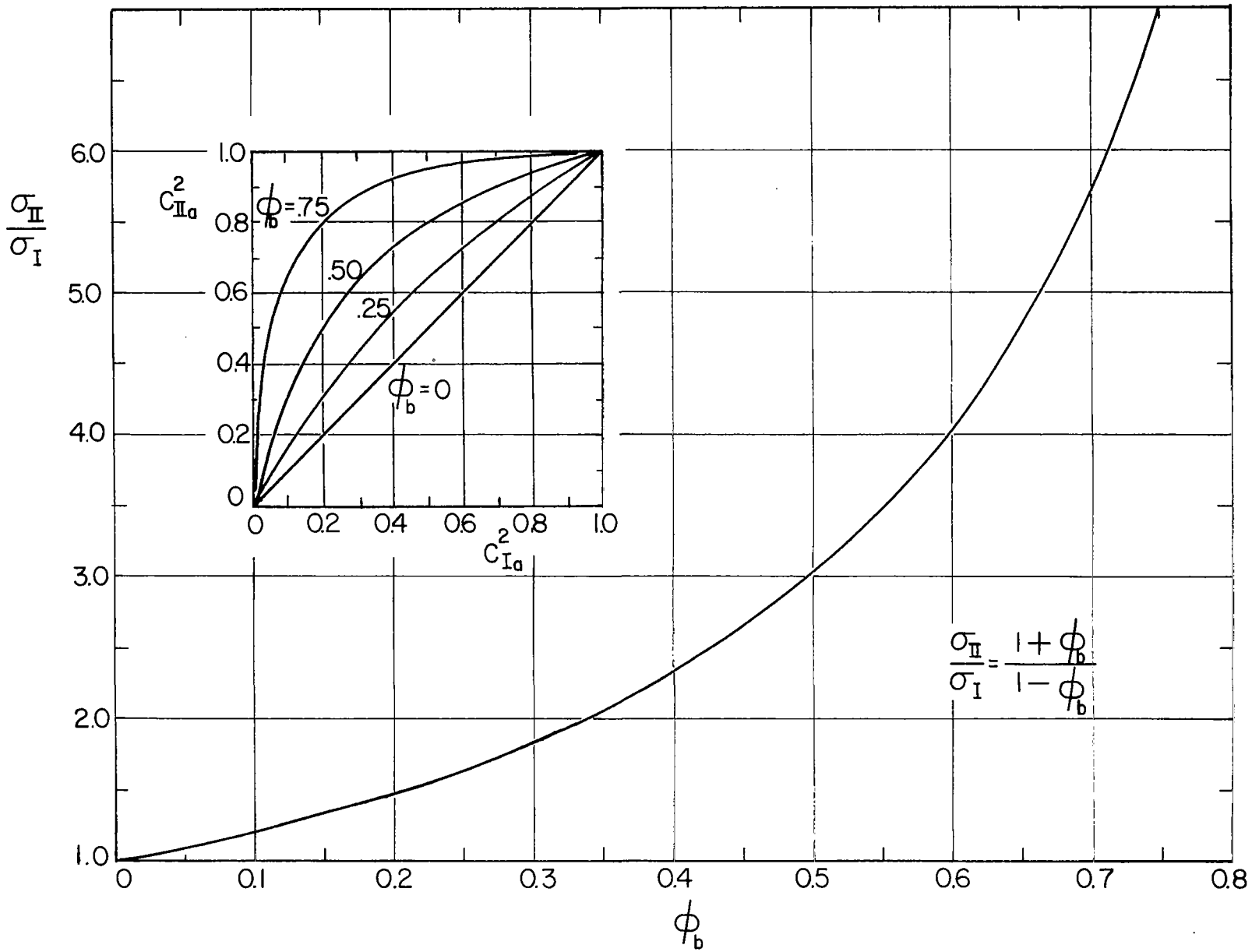

Fig. 11. $\frac{\sigma_{II}}{\sigma_I} = \frac{\sigma_{II}}{\sigma_I}(\varphi_b)$ and $C_{I_a}{}^2 (C_{II_a}{}^2, \varphi_b)$

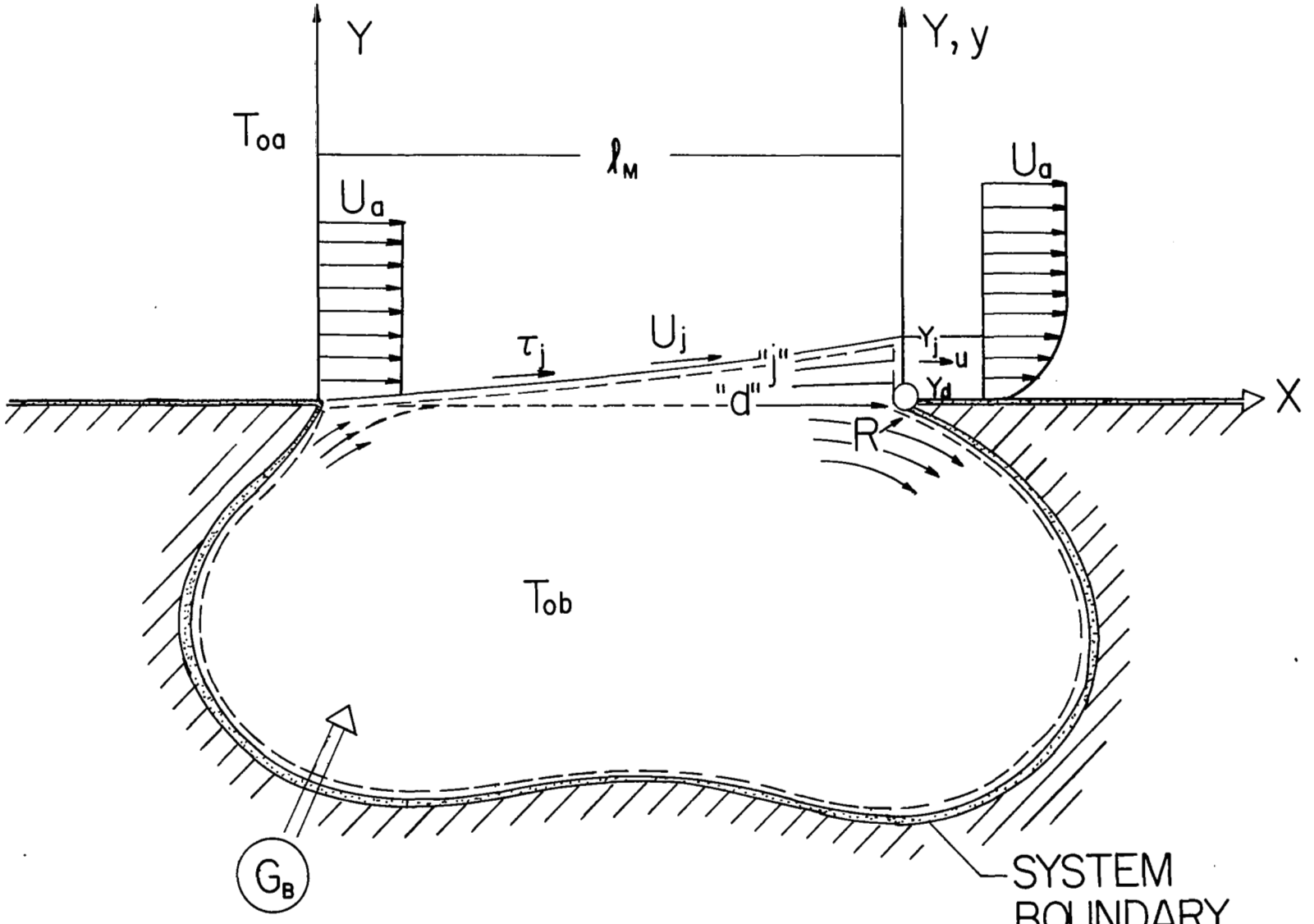

Fig. 12. Model for Flow Past a Cavity

TABLE I-A-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .CO PHI B = .00

ETA	PHI	LAMBCA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.CO	.0000	.10CO	-.0000	-.0000	-.0000	.0000
-1.CO	.0786	.17C8	.1861	.0072	.0251	.0004
-.9O	.1015	.1914	.2357	.0117	.0341	.0008
-.8O	.1289	.2160	.2921	.0182	.0456	.0015
-.7O	.1611	.2450	.3548	.0273	.0601	.0029
-.6O	.1981	.2783	.4234	.0396	.0780	.0051
-.5O	.2397	.3158	.4970	.0557	.0998	.0086
-.4O	.2858	.3572	.5750	.0762	.1261	.0140
-.36	.3053	.3748	.6073	.0857	.1379	.0168
-.32	.3254	.3929	.6401	.0961	.1505	.0201
-.28	.3461	.4115	.6735	.1073	.1639	.0239
-.24	.3671	.4304	.7074	.1194	.1782	.0282
-.2O	.3886	.4498	.7418	.1324	.1933	.0331
-.16	.4105	.4694	.7765	.1463	.2093	.0386
-.12	.4326	.4894	.8117	.1611	.2262	.0449
-.C8	.4550	.5095	.8472	.1769	.2439	.0519
-.C4	.4774	.5297	.8831	.1936	.2626	.0597
.CO	.5000	.5500	.9193	.2113	.2821	.0683
.C4	.5226	.5703	.9558	.2300	.3026	.0779
.C8	.5450	.5905	.9926	.2496	.3239	.0884
.12	.5674	.6106	1.0297	.2702	.3462	.0998
.16	.5895	.63C6	1.0670	.2918	.3693	.1123
.2O	.6114	.65C2	1.1045	.3143	.3933	.1258
.24	.6329	.6696	1.1422	.3378	.4182	.1404
.28	.6539	.6886	1.1801	.3621	.4439	.1561
.32	.6746	.7071	1.2181	.3874	.4705	.1729
.36	.6947	.7252	1.2564	.4136	.4979	.1909
.4O	.7142	.7428	1.2948	.4407	.5261	.2099
.5O	.7603	.7842	1.3913	.5119	.5998	.2625
.6O	.8019	.8217	1.4886	.5879	.6780	.3219
.7O	.8389	.8550	1.5865	.6682	.7601	.3878
.8O	.8711	.8840	1.6848	.7523	.8456	.4598
.9O	.8985	.9086	1.7835	.8397	.9341	.5372
1.CO	.9214	.9292	1.8826	.9299	1.0251	.6192
1.5O	.9831	.9847	2.3804	1.4070	1.5043	1.0766
2.OO	.9977	.9979	2.8800	1.9028	2.0005	1.5686
2.34	.9995	.9996	3.2199	2.2423	2.3401	1.9078

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.0637	.5359	.9776	.2415	.3151	.0840

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.0977	.2415	.0978

TABLE I-A-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .00 PHI B = .20

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.2000	.1000	-10.0000	-2.0000	-1.0000	.0000
-1.00	.2629	.1708	-2.1861	-.4028	-.1799	.0149
-.90	.2812	.1914	-2.0357	-.3619	-.1527	.0200
-.80	.3032	.2160	-1.8921	-.3200	-.1235	.0265
-.70	.3289	.2450	-1.7548	-.2767	-.0920	.0347
-.60	.3585	.2783	-1.6233	-.2316	-.0576	.0449
-.50	.3918	.3158	-1.4970	-.1842	-.0201	.0576
-.40	.4286	.3572	-1.3750	-.1342	.0209	.0732
-.36	.4443	.3748	-1.3273	-.1134	.0383	.0804
-.32	.4603	.3929	-1.2801	-.0921	.0564	.0882
-.28	.4768	.4115	-1.2335	-.0703	.0751	.0965
-.24	.4937	.4304	-1.1874	-.0479	.0946	.1055
-.20	.5109	.4498	-1.1417	-.0249	.1147	.1152
-.16	.5284	.4694	-1.0965	-.0014	.1354	.1256
-.12	.5461	.4894	-1.0517	.0226	.1569	.1368
-.08	.5640	.5095	-1.0072	.0473	.1791	.1487
-.04	.5820	.5297	-.9631	.0726	.2020	.1614
.00	.6000	.5500	-.9193	.0985	.2257	.1750
.04	.6180	.5703	-.8758	.1249	.2500	.1894
.08	.6360	.5905	-.8326	.1520	.2751	.2046
.12	.6539	.6106	-.7897	.1797	.3009	.2208
.16	.6716	.6306	-.7469	.2081	.3274	.2378
.20	.6891	.6502	-.7045	.2370	.3547	.2558
.24	.7063	.6696	-.6622	.2665	.3826	.2747
.28	.7232	.6886	-.6201	.2966	.4111	.2945
.32	.7397	.7071	-.5781	.3272	.4404	.3153
.36	.7557	.7252	-.5364	.3585	.4703	.3370
.40	.7714	.7428	-.4948	.3902	.5009	.3596
.50	.8082	.7842	-.3913	.4720	.5799	.4200
.60	.8415	.8217	-.2886	.5567	.6624	.4858
.70	.8711	.8550	-.1865	.6442	.7480	.5567
.80	.8968	.8840	-.0848	.7341	.8365	.6321
.90	.9188	.9086	.0165	.8261	.9273	.7116
1.00	.9371	.9292	.1175	.9198	1.0201	.7946
1.50	.9864	.9847	.6196	1.4052	1.5035	1.2439
2.00	.9981	.9979	1.1200	1.9026	2.0004	1.7181
2.30	.9995	.9995	1.4201	2.2023	2.3001	2.0055

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
-.0533	.5759	-.9778	.0641	.1943	.1571

ETA W	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
-.0979	.3246	-.0782

TABLE I-A-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .00 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.4000	.1000	-20.0000	-8.0000	-2.0000	.0000
-1.00	.4472	.1708	-4.5582	-1.7760	-.3849	.0389
-.90	.4609	.1914	-4.3069	-1.6620	-.3395	.0505
-.80	.4774	.2160	-4.0762	-1.5538	-.2926	.0643
-.70	.4967	.2450	-3.8645	-1.4508	-.2440	.0805
-.60	.5188	.2783	-3.6700	-1.3522	-.1932	.0995
-.50	.5438	.3158	-3.4909	-1.2570	-.1401	.1213
-.40	.5715	.3572	-3.3249	-1.1645	-.0844	.1463
-.36	.5832	.3748	-3.2618	-1.1281	-.0613	.1573
-.32	.5953	.3929	-3.2004	-1.0919	-.0377	.1688
-.28	.6076	.4115	-3.1406	-1.0559	-.0136	.1808
-.24	.6203	.4304	-3.0822	-1.0201	.0109	.1935
-.20	.6332	.4498	-3.0252	-.9844	.0360	.2067
-.16	.6463	.4694	-2.9695	-.9488	.0616	.2206
-.12	.6596	.4894	-2.9151	-.9132	.0877	.2351
-.08	.6730	.5095	-2.8617	-.8777	.1143	.2503
-.04	.6865	.5297	-2.8094	-.8421	.1415	.2661
.00	.7000	.5500	-2.7580	-.8065	.1693	.2826
.04	.7135	.5703	-2.7075	-.7708	.1975	.2997
.08	.7270	.5905	-2.6579	-.7351	.2263	.3175
.12	.7404	.6106	-2.6090	-.6992	.2557	.3360
.16	.7537	.6306	-2.5608	-.6632	.2856	.3552
.20	.7668	.6502	-2.5134	-.6271	.3160	.3750
.24	.7797	.6696	-2.4665	-.5909	.3469	.3955
.28	.7924	.6886	-2.4202	-.5545	.3784	.4167
.32	.8047	.7071	-2.3744	-.5179	.4103	.4386
.36	.8168	.7252	-2.3291	-.4812	.4427	.4611
.40	.8285	.7428	-2.2843	-.4443	.4756	.4843
.50	.8562	.7842	-2.1740	-.3514	.5599	.5450
.60	.8812	.8217	-2.0658	-.2574	.6468	.6093
.70	.9033	.8550	-1.9594	-.1624	.7360	.6771
.80	.9226	.8840	-1.8544	-.0666	.8274	.7478
.90	.9391	.9086	-1.7505	.0301	.9205	.8212
1.00	.9528	.9292	-1.6476	.1275	1.0151	.8969
1.50	.9898	.9847	-1.1411	.6214	1.5026	1.2974
2.00	.9986	.9979	-.6399	1.1202	2.0003	1.7138
2.24	.9995	.9993	-.3998	1.3601	2.2401	1.9151

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
-.1334	.6551	-2.9332	-.9251	.0789	.2302

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
-.2934	.4136	-.1760

TABLE I-A-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

T_{OB}/T_{OA} = .10 C_A^2 = .CO PHI B = .60

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.6000	.1000	-30.0000	-18.0000	-3.0000	.0000
-1.00	.6315	.1708	-6.9303	-4.1124	-.5899	.0557
-.90	.6406	.1914	-6.5782	-3.8885	-.5264	.0713
-.80	.6516	.2160	-6.2602	-3.6831	-.4618	.0895
-.70	.6644	.2450	-5.9741	-3.4949	-.3960	.1102
-.60	.6792	.2783	-5.7167	-3.3221	-.3288	.1337
-.50	.6959	.3158	-5.4847	-3.1627	-.2601	.1597
-.40	.7143	.3572	-5.2748	-3.0147	-.1896	.1884
-.36	.7221	.3748	-5.1963	-2.9583	-.1608	.2007
-.32	.7302	.3929	-5.1206	-2.9034	-.1318	.2133
-.28	.7384	.4114	-5.0475	-2.8497	-.1024	.2264
-.24	.7469	.4304	-4.9770	-2.7973	-.0727	.2399
-.20	.7555	.4498	-4.9087	-2.7460	-.0427	.2539
-.16	.7642	.4694	-4.8425	-2.6958	-.0123	.2682
-.12	.7730	.4894	-4.7784	-2.6465	.0185	.2830
-.08	.7820	.5095	-4.7161	-2.5980	.0496	.2983
-.04	.7910	.5297	-4.6555	-2.5504	.0810	.3139
.00	.8000	.5500	-4.5966	-2.5035	.1128	.3300
.04	.8090	.5703	-4.5391	-2.4573	.1450	.3465
.08	.8180	.5905	-4.4831	-2.4117	.1776	.3634
.12	.8270	.6106	-4.4283	-2.3666	.2105	.3808
.16	.8358	.6306	-4.3747	-2.3221	.2437	.3985
.20	.8445	.6502	-4.3222	-2.2780	.2773	.4167
.24	.8531	.6696	-4.2708	-2.2343	.3113	.4352
.28	.8616	.6886	-4.2203	-2.1910	.3456	.4541
.32	.8698	.7071	-4.1706	-2.1480	.3802	.4735
.36	.8779	.7252	-4.1218	-2.1054	.4152	.4932
.40	.8857	.7428	-4.0738	-2.0630	.4504	.5132
.50	.9041	.7842	-3.9566	-1.9581	.5399	.5649
.60	.9208	.8217	-3.8430	-1.8544	.6312	.6186
.70	.9356	.8550	-3.7323	-1.7517	.7240	.6742
.80	.9484	.8840	-3.6239	-1.6496	.8182	.7313
.90	.9594	.9086	-3.5175	-1.5481	.9136	.7899
1.00	.9685	.9292	-3.4126	-1.4470	1.0101	.8496
1.50	.9932	.9847	-2.9018	-.9447	1.5017	1.1597
2.00	.9991	.9979	-2.3998	-.4443	2.0002	1.4778
2.16	.9995	.9990	-2.2397	-.2842	2.1601	1.5801

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
-.1880	.7581	-4.8886	-2.7308.	-.0336	.2581

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
-.4889	.5059	-.1955

TABLE I-B-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .20 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	.1000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	.1708	.1493	.0058	.0202	.0003
-.90	.1015	.1914	.1893	.0094	.0274	.0006
-.80	.1289	.2160	.2350	.0147	.0367	.0012
-.70	.1611	.2450	.2862	.0221	.0485	.0023
-.60	.1981	.2783	.3424	.0322	.0632	.0041
-.50	.2397	.3158	.4032	.0455	.0813	.0071
-.40	.2858	.3572	.4683	.0626	.1032	.0116
-.36	.3053	.3748	.4954	.0706	.1131	.0139
-.32	.3254	.3929	.5232	.0794	.1237	.0167
-.28	.3461	.4115	.5514	.0889	.1351	.0199
-.24	.3671	.4304	.5803	.0992	.1473	.0236
-.20	.3886	.4498	.6097	.1103	.1602	.0278
-.16	.4105	.4694	.6396	.1222	.1739	.0325
-.12	.4326	.4894	.6700	.1350	.1885	.0379
-.08	.4550	.5095	.7008	.1487	.2039	.0440
-.04	.4774	.5297	.7322	.1633	.2202	.0508
.00	.5000	.5500	.7639	.1789	.2374	.0584
.04	.5226	.5703	.7962	.1953	.2554	.0668
.08	.5450	.5905	.8288	.2128	.2744	.0761
.12	.5674	.6106	.8618	.2311	.2942	.0864
.16	.5895	.6306	.8953	.2505	.3150	.0976
.20	.6114	.6502	.9291	.2708	.3366	.1098
.24	.6329	.6696	.9633	.2920	.3592	.1230
.28	.6539	.6886	.9978	.3143	.3826	.1373
.32	.6746	.7071	1.0327	.3374	.4069	.1527
.36	.6947	.7252	1.0678	.3615	.4322	.1692
.40	.7142	.7428	1.1034	.3865	.4582	.1868
.50	.7603	.7842	1.1934	.4530	.5270	.2358
.60	.8019	.8217	1.2852	.5247	.6008	.2919
.70	.8389	.8550	1.3785	.6013	.6790	.3548
.80	.8711	.8840	1.4731	.6822	.7613	.4240
.90	.8985	.9086	1.5688	.7669	.8471	.4990
1.00	.9214	.9292	1.6654	.8549	.9359	.5791
1.50	.9831	.9847	2.1576	1.3266	1.4097	1.0314
2.00	.9977	.9979	2.6562	1.8214	1.9049	1.5224
2.34	.9995	.9996	2.9960	2.1608	2.2444	1.8614

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.0878	.5494	.8352	.2163	.2782	.0781

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.1792	.2163	.1044

TABLE I-B-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .20 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	.1000	-8.6957	-1.7391	-.8696	.0000
-1.00	.2629	.1708	-1.9019	-.3505	-.1565	.0129
-.90	.2812	.1914	-1.7709	-.3149	-.1329	.0174
-.80	.3032	.2160	-1.6455	-.2783	-.1074	.0230
-.70	.3289	.2450	-1.5253	-.2403	-.0797	.0302
-.60	.3585	.2783	-1.4097	-.2007	-.0495	.0392
-.50	.3918	.3158	-1.2980	-.1588	-.0164	.0504
-.40	.4286	.3572	-1.1896	-.1144	.0200	.0643
-.36	.4443	.3748	-1.1470	-.0958	.0356	.0707
-.32	.4603	.3929	-1.1047	-.0767	.0518	.0777
-.28	.4768	.4115	-1.0629	-.0571	.0687	.0852
-.24	.4937	.4304	-1.0213	-.0369	.0861	.0933
-.20	.5109	.4498	-.9801	-.0162	.1043	.1021
-.16	.5284	.4694	-.9391	.0051	.1231	.1115
-.12	.5461	.4894	-.8983	.0270	.1427	.1217
-.08	.5640	.5095	-.8577	.0495	.1629	.1325
-.04	.5820	.5297	-.8174	.0727	.1839	.1442
.00	.6000	.5500	-.7771	.0965	.2057	.1566
.04	.6180	.5703	-.7370	.1209	.2281	.1699
.08	.6360	.5905	-.6970	.1460	.2513	.1840
.12	.6539	.6106	-.6571	.1717	.2753	.1990
.16	.6716	.6306	-.6173	.1981	.3000	.2149
.20	.6891	.6502	-.5776	.2251	.3254	.2317
.24	.7063	.6696	-.5379	.2528	.3516	.2495
.28	.7232	.6886	-.4982	.2811	.3786	.2681
.32	.7397	.7071	-.4586	.3101	.4062	.2877
.36	.7557	.7252	-.4190	.3397	.4346	.3083
.40	.7714	.7428	-.3795	.3699	.4636	.3298
.50	.8082	.7842	-.2805	.4481	.5392	.3876
.60	.8415	.8217	-.1816	.5297	.6187	.4510
.70	.8711	.8550	-.0826	.6146	.7017	.5197
.80	.8968	.8840	.0166	.7023	.7880	.5933
.90	.9188	.9086	.1159	.7924	.8770	.6712
1.00	.9371	.9292	.2153	.8847	.9684	.7529
1.50	.9864	.9847	.7139	1.3667	1.4483	1.1990
2.00	.9981	.9979	1.2136	1.8633	1.9445	1.6726
2.30	.9995	.9995	1.5136	2.1630	2.2442	1.9600

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (EIA J) 3	I (ETA J) 4
-.0345	.5844	-.8118	.0759	.1869	.1459

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
-.0254	.2979	-.0883

TABLE I-B-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .20 PHI B = .40

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.4000	.1000	-23.5294	-9.4118	-2.3529	.0000
-1.00	.4472	.1708	-5.5447	-2.1661	-.4768	.0426
-.90	.4609	.1914	-5.2843	-2.0480	-.4298	.0546
-.80	.4774	.2160	-5.0486	-1.9375	-.3819	.0686
-.70	.4967	.2450	-4.8353	-1.8337	-.3329	.0850
-.60	.5188	.2783	-4.6415	-1.7354	-.2823	.1039
-.50	.5438	.3158	-4.4645	-1.6414	-.2298	.1255
-.40	.5715	.3572	-4.3016	-1.5506	-.1751	.1500
-.36	.5832	.3748	-4.2399	-1.5150	-.1525	.1607
-.32	.5953	.3929	-4.1799	-1.4796	-.1295	.1720
-.28	.6076	.4115	-4.1215	-1.4445	-.1061	.1837
-.24	.6203	.4304	-4.0646	-1.4096	-.0821	.1961
-.20	.6332	.4498	-4.0092	-1.3749	-.0577	.2090
-.16	.6463	.4694	-3.9550	-1.3402	-.0328	.2225
-.12	.6596	.4894	-3.9019	-1.3056	-.0074	.2366
-.08	.6730	.5095	-3.8500	-1.2710	.0185	.2513
-.04	.6865	.5297	-3.7991	-1.2364	.0450	.2667
.00	.7000	.5500	-3.7491	-1.2017	.0720	.2827
.04	.7135	.5703	-3.6999	-1.1670	.0995	.2994
.08	.7270	.5905	-3.6516	-1.1321	.1276	.3168
.12	.7404	.6106	-3.6039	-1.0972	.1562	.3348
.16	.7537	.6306	-3.5570	-1.0621	.1853	.3535
.20	.7668	.6502	-3.5106	-1.0269	.2150	.3729
.24	.7797	.6696	-3.4648	-.9914	.2453	.3929
.28	.7924	.6886	-3.4195	-.9558	.2760	.4137
.32	.8047	.7071	-3.3747	-.9201	.3073	.4351
.36	.8168	.7252	-3.3303	-.8841	.3390	.4572
.40	.8285	.7428	-3.2864	-.8479	.3713	.4799
.50	.8562	.7842	-3.1780	-.7566	.4541	.5395
.60	.8812	.8217	-3.0714	-.6640	.5397	.6029
.70	.9033	.8550	-2.9663	-.5702	.6279	.6698
.80	.9226	.8840	-2.8624	-.4753	.7183	.7398
.90	.9391	.9086	-2.7594	-.3794	.8106	.8126
1.00	.9528	.9292	-2.6571	-.2826	.9046	.8878
1.50	.9898	.9847	-2.1521	.2097	1.3906	1.2871
2.00	.9986	.9979	-1.6513	.7083	1.8880	1.7032
2.24	.9995	.9993	-1.4112	.9481	2.1278	1.9045

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
-.1429	.6519	-3.9322	-1.3254	-.0220	.2284

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
-.2810	.4124	-.2218

TABLE I-B-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .20 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	.1000	-85.7143	-51.4286	-8.5714	.0000
-1.00	.6315	.1708	-23.1635	-13.8101	-2.1184	.1068
-.90	.6406	.1914	-22.6528	-13.4854	-2.0262	.1294
-.80	.6516	.2160	-22.2207	-13.2064	-1.9385	.1541
-.70	.6644	.2450	-21.8533	-12.9648	-1.8541	.1807
-.60	.6792	.2783	-21.5384	-12.7533	-1.7719	.2093
-.50	.6959	.3158	-21.2659	-12.5660	-1.6912	.2399
-.40	.7143	.3572	-21.0273	-12.3978	-1.6111	.2726
-.36	.7221	.3748	-20.9398	-12.3350	-1.5791	.2862
-.32	.7302	.3929	-20.8563	-12.2744	-1.5471	.3001
-.28	.7384	.4114	-20.7764	-12.2158	-1.5150	.3145
-.24	.7469	.4304	-20.6999	-12.1589	-1.4827	.3291
-.20	.7555	.4498	-20.6264	-12.1037	-1.4504	.3441
-.16	.7642	.4694	-20.5558	-12.0500	-1.4179	.3595
-.12	.7730	.4894	-20.4877	-11.9977	-1.3853	.3752
-.08	.7820	.5095	-20.4219	-11.9466	-1.3525	.3912
-.04	.7910	.5297	-20.3583	-11.8966	-1.3194	.4077
.00	.8000	.5500	-20.2967	-11.8476	-1.2862	.4245
.04	.8090	.5703	-20.2369	-11.7995	-1.2527	.4417
.08	.8180	.5905	-20.1788	-11.7522	-1.2190	.4592
.12	.8270	.6106	-20.1223	-11.7057	-1.1850	.4771
.16	.8358	.6306	-20.0671	-11.6598	-1.1508	.4954
.20	.8445	.6502	-20.0132	-11.6146	-1.1163	.5140
.24	.8531	.6696	-19.9606	-11.5699	-1.0815	.5330
.28	.8616	.6886	-19.9090	-11.5257	-1.0465	.5523
.32	.8698	.7071	-19.8584	-11.4819	-1.0112	.5720
.36	.8779	.7252	-19.8088	-11.4385	-.9757	.5920
.40	.8857	.7428	-19.7600	-11.3955	-.9399	.6124
.50	.9041	.7842	-19.6414	-11.2893	-.8493	.6647
.60	.9208	.8217	-19.5267	-11.1847	-.7572	.7189
.70	.9356	.8550	-19.4152	-11.0812	-.6637	.7749
.80	.9484	.8840	-19.3064	-10.9786	-.5690	.8323
.90	.9594	.9086	-19.1996	-10.8767	-.4732	.8911
1.00	.9685	.9292	-19.0944	-10.7753	-.3766	.9510
1.50	.9932	.9847	-18.5829	-10.2724	.1157	1.2614
2.00	.9991	.9979	-18.0808	-9.7719	.6143	1.5796
2.16	.9995	.9990	-17.9207	-9.6119	.7742	1.6819

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
-.2778	.7389	-20.7721	-12.2126	-1.5132	.3153

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
-.6914	.6268	-.3122

TABLE I-C-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .40 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	.1000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	.1708	.1123	.0044	.0152	.0002
-.90	.1015	.1914	.1425	.0071	.0207	.0005
-.80	.1289	.2160	.1773	.0111	.0277	.0009
-.70	.1611	.2450	.2164	.0168	.0367	.0018
-.60	.1981	.2783	.2596	.0245	.0480	.0032
-.50	.2397	.3158	.3068	.0349	.0621	.0054
-.40	.2858	.3572	.3578	.0483	.0792	.0090
-.36	.3053	.3748	.3793	.0546	.0871	.0108
-.32	.3254	.3929	.4013	.0615	.0955	.0130
-.28	.3461	.4115	.4238	.0691	.1046	.0156
-.24	.3671	.4304	.4469	.0774	.1143	.0185
-.20	.3886	.4498	.4706	.0863	.1247	.0219
-.16	.4105	.4694	.4949	.0960	.1359	.0258
-.12	.4326	.4894	.5196	.1064	.1478	.0302
-.08	.4550	.5095	.5449	.1177	.1604	.0352
-.04	.4774	.5297	.5708	.1297	.1738	.0408
.00	.5000	.5500	.5972	.1426	.1881	.0471
.04	.5226	.5703	.6241	.1564	.2032	.0541
.08	.5450	.5905	.6516	.1711	.2191	.0620
.12	.5674	.6106	.6796	.1867	.2359	.0706
.16	.5895	.6306	.7081	.2032	.2536	.0802
.20	.6114	.6502	.7372	.2206	.2723	.0907
.24	.6329	.6696	.7667	.2390	.2918	.1021
.28	.6539	.6886	.7968	.2583	.3122	.1146
.32	.6746	.7071	.8274	.2787	.3335	.1280
.36	.6947	.7252	.8585	.2999	.3558	.1426
.40	.7142	.7428	.8900	.3222	.3790	.1583
.50	.7603	.7842	.9711	.3819	.4409	.2024
.60	.8019	.8217	1.0549	.4475	.5082	.2537
.70	.8389	.8550	1.1415	.5185	.5808	.3120
.80	.8711	.8840	1.2304	.5946	.6582	.3771
.90	.8985	.9086	1.3214	.6752	.7398	.4484
1.00	.9214	.9292	1.4144	.7598	.8252	.5254
1.50	.9831	.9847	1.8975	1.2230	1.2904	.9696
2.00	.9977	.9979	2.3944	1.7160	1.7838	1.4589
2.34	.9995	.9996	2.7340	2.0553	2.1231	1.7977

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.1188	.5667	.6788	.1862	.2354	.0704

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.2847	.1862	.1131

TABLE I-C-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .40 PHI B = .20

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.2000	.1000	-7.1429	-1.4286	-.7143	.0000
-1.00	.2629	.1768	-1.5632	-.2881	-.1287	.0106
-.90	.2812	.1914	-1.4554	-.2588	-.1092	.0143
-.80	.3032	.2160	-1.3519	-.2286	-.0882	.0190
-.70	.3289	.2450	-1.2523	-.1971	-.0653	.0249
-.60	.3585	.2783	-1.1560	-.1641	-.0401	.0324
-.50	.3918	.3158	-1.0624	-.1290	-.0124	.0418
-.40	.4286	.3572	-.9710	-.0915	.0184	.0535
-.36	.4443	.3748	-.9348	-.0758	.0316	.0590
-.32	.4603	.3929	-.8989	-.0595	.0454	.0649
-.28	.4768	.4115	-.8631	-.0427	.0598	.0713
-.24	.4937	.4304	-.8274	-.0254	.0748	.0783
-.20	.5109	.4498	-.7919	-.0076	.0905	.0858
-.16	.5284	.4694	-.7564	.0108	.1068	.0940
-.12	.5461	.4894	-.7210	.0299	.1237	.1028
-.08	.5640	.5095	-.6856	.0495	.1414	.1123
-.04	.5820	.5297	-.6502	.0698	.1598	.1225
.00	.6000	.5500	-.6147	.0908	.1790	.1335
.04	.6180	.5703	-.5792	.1124	.1988	.1452
.08	.6360	.5905	-.5437	.1347	.2195	.1578
.12	.6539	.6106	-.5080	.1577	.2409	.1712
.16	.6716	.6306	-.4722	.1814	.2631	.1855
.20	.6891	.6502	-.4364	.2058	.2861	.2006
.24	.7063	.6696	-.4004	.2309	.3098	.2167
.28	.7232	.6886	-.3642	.2567	.3344	.2337
.32	.7397	.7071	-.3280	.2833	.3597	.2517
.36	.7557	.7252	-.2915	.3105	.3858	.2706
.40	.7714	.7428	-.2549	.3385	.4126	.2905
.50	.8082	.7842	-.1627	.4113	.4831	.3444
.60	.8415	.8217	-.0695	.4883	.5580	.4041
.70	.8711	.8550	.0248	.5690	.6371	.4696
.80	.8968	.8840	.1200	.6533	.7199	.5402
.90	.9188	.9086	.2162	.7406	.8061	.6157
1.00	.9371	.9292	.3131	.8305	.8952	.6953
1.50	.9864	.9847	.8057	1.3068	1.3694	1.1362
2.00	.9981	.9979	1.3044	1.8024	1.8646	1.6088
2.30	.9995	.9995	1.6042	2.1019	2.1641	1.8960

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
-.0084	.5962	-.6221	.0864	.1749	.1311

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.0737	.2635	-.1018

TABLE I-C-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .40 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.4000	.1000	-33.3333	-13.3333	-3.3333	.0000
-1.00	.4472	.1708	-8.4306	-3.3103	-.7501	.0509
-.90	.4609	.1914	-8.1532	-3.1845	-.7001	.0637
-.80	.4774	.2160	-7.9090	-3.0700	-.6505	.0783
-.70	.4967	.2450	-7.6929	-2.9648	-.6008	.0948
-.60	.5188	.2783	-7.5002	-2.8671	-.5505	.1136
-.50	.5438	.3158	-7.3266	-2.7749	-.4991	.1348
-.40	.5715	.3572	-7.1685	-2.6868	-.4460	.1586
-.36	.5832	.3748	-7.1090	-2.6524	-.4242	.1689
-.32	.5953	.3929	-7.0512	-2.6184	-.4020	.1797
-.28	.6076	.4115	-6.9952	-2.5847	-.3795	.1910
-.24	.6203	.4304	-6.9406	-2.5512	-.3565	.2028
-.20	.6332	.4498	-6.8874	-2.5179	-.3331	.2152
-.16	.6463	.4694	-6.8355	-2.4847	-.3093	.2282
-.12	.6596	.4894	-6.7848	-2.4516	-.2849	.2417
-.08	.6730	.5095	-6.7351	-2.4185	-.2601	.2558
-.04	.6865	.5297	-6.6864	-2.3853	-.2348	.2705
.00	.7000	.5500	-6.6385	-2.3521	-.2090	.2858
.04	.7135	.5703	-6.5914	-2.3189	-.1826	.3018
.08	.7270	.5905	-6.5451	-2.2855	-.1557	.3185
.12	.7404	.6106	-6.4994	-2.2519	-.1282	.3357
.16	.7537	.6306	-6.4542	-2.2182	-.1002	.3537
.20	.7668	.6502	-6.4096	-2.1843	-.0717	.3724
.24	.7797	.6696	-6.3655	-2.1502	-.0426	.3917
.28	.7924	.6886	-6.3218	-2.1159	-.0129	.4117
.32	.8047	.7071	-6.2786	-2.0813	.0173	.4324
.36	.8168	.7252	-6.2356	-2.0465	.0480	.4537
.40	.8285	.7428	-6.1930	-2.0114	.0793	.4757
.50	.8562	.7842	-6.0876	-1.9227	.1598	.5337
.60	.8812	.8217	-5.9836	-1.8323	.2433	.5955
.70	.9033	.8550	-5.8807	-1.7404	.3297	.6611
.80	.9226	.8840	-5.7785	-1.6471	.4186	.7300
.90	.9391	.9086	-5.6769	-1.5525	.5097	.8018
1.00	.9528	.9292	-5.5757	-1.4568	.6027	.8762
1.50	.9898	.9847	-5.0733	-.9669	1.0862	1.2734
2.00	.9986	.9979	-4.5729	-.4688	1.5832	1.6892
2.24	.9995	.9993	-4.3329	-.2290	1.8229	1.8904

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
-.1633	.6452	-6.8398	-2.4874	-.3112	.2271

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
-.2669	.4142	-.3036

TABLE I-D-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .60 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	.1000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	.1708	.0750	.0029	.0101	.0002
-.90	.1015	.1914	.0954	.0048	.0138	.0003
-.80	.1289	.2160	.1189	.0075	.0186	.0006
-.70	.1611	.2450	.1455	.0113	.0247	.0012
-.60	.1981	.2783	.1751	.0166	.0325	.0022
-.50	.2397	.3158	.2077	.0238	.0422	.0037
-.40	.2858	.3572	.2432	.0331	.0541	.0062
-.36	.3053	.3748	.2583	.0376	.0597	.0075
-.32	.3254	.3929	.2739	.0425	.0656	.0090
-.28	.3461	.4115	.2899	.0479	.0721	.0109
-.24	.3671	.4304	.3065	.0538	.0791	.0130
-.20	.3886	.4498	.3236	.0602	.0866	.0154
-.16	.4105	.4694	.3411	.0673	.0946	.0182
-.12	.4326	.4894	.3592	.0749	.1033	.0214
-.08	.4550	.5095	.3779	.0832	.1126	.0251
-.04	.4774	.5297	.3970	.0921	.1226	.0293
.00	.5000	.5500	.4167	.1017	.1332	.0340
.04	.5226	.5703	.4370	.1121	.1446	.0393
.08	.5450	.5905	.4579	.1232	.1567	.0452
.12	.5674	.6106	.4793	.1352	.1696	.0519
.16	.5895	.6306	.5014	.1479	.1833	.0593
.20	.6114	.6502	.5240	.1615	.1978	.0674
.24	.6329	.6696	.5473	.1760	.2131	.0764
.28	.6539	.6886	.5712	.1914	.2294	.0863
.32	.6746	.7071	.5958	.2077	.2465	.0972
.36	.6947	.7252	.6209	.2249	.2645	.1090
.40	.7142	.7428	.6468	.2432	.2835	.1218
.50	.7603	.7842	.7142	.2929	.3351	.1585
.60	.8019	.8217	.7858	.3489	.3926	.2023
.70	.8389	.8550	.8614	.4109	.4560	.2532
.80	.8711	.8840	.9408	.4789	.5251	.3114
.90	.8985	.9086	1.0238	.5524	.5995	.3764
1.00	.9214	.9292	1.1101	.6309	.6788	.4479
1.50	.9831	.9847	1.5763	1.0779	1.1278	.8767
2.00	.9977	.9979	2.0697	1.5676	1.6178	1.3627
2.34	.9995	.9996	2.4090	1.9065	1.9567	1.7012

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.1621	.5906	.5025	.1486	.1840	.0597

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.4335	.1486	.1256

TABLE I-D-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .60 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	.1000	-5.2632	-1.0526	-.5263	.0000
-1.00	.2629	.1708	-1.1527	-.2125	-.0949	.0078
-.90	.2812	.1914	-1.0730	-.1908	-.0805	.0105
-.80	.3032	.2160	-.9963	-.1684	-.0649	.0140
-.70	.3289	.2450	-.9221	-.1450	-.0479	.0184
-.60	.3585	.2783	-.8500	-.1202	-.0290	.0240
-.50	.3918	.3158	-.7794	-.0938	-.0081	.0311
-.40	.4286	.3572	-.7097	-.0652	.0154	.0401
-.36	.4443	.3748	-.6819	-.0531	.0255	.0442
-.32	.4603	.3929	-.6542	-.0406	.0361	.0488
-.28	.4768	.4115	-.6265	-.0276	.0473	.0538
-.24	.4937	.4304	-.5987	-.0141	.0590	.0592
-.20	.5109	.4498	-.5709	-.0001	.0712	.0651
-.16	.5284	.4694	-.5429	.0144	.0841	.0716
-.12	.5461	.4894	-.5149	.0295	.0975	.0785
-.08	.5640	.5095	-.4866	.0452	.1116	.0861
-.04	.5820	.5297	-.4582	.0614	.1264	.0943
.00	.6000	.5500	-.4296	.0784	.1419	.1032
.04	.6180	.5703	-.4007	.0959	.1580	.1127
.08	.6360	.5905	-.3716	.1142	.1749	.1230
.12	.6539	.6106	-.3422	.1332	.1926	.1341
.16	.6716	.6306	-.3125	.1529	.2110	.1459
.20	.6891	.6502	-.2825	.1733	.2302	.1586
.24	.7063	.6696	-.2521	.1945	.2503	.1722
.28	.7232	.6886	-.2214	.2164	.2711	.1866
.32	.7397	.7071	-.1904	.2391	.2928	.2020
.36	.7557	.7252	-.1590	.2626	.3153	.2183
.40	.7714	.7428	-.1271	.2869	.3386	.2356
.50	.8082	.7842	-.0460	.3510	.4007	.2830
.60	.8415	.8217	.0377	.4200	.4678	.3367
.70	.8711	.8550	.1237	.4937	.5400	.3963
.80	.8968	.8840	.2120	.5718	.6168	.4619
.90	.9188	.9086	.3024	.6539	.6979	.5328
1.00	.9371	.9292	.3947	.7396	.7827	.6087
1.50	.9864	.9847	.8760	1.2050	1.2461	1.0395
2.00	.9981	.9979	1.3724	1.6983	1.7391	1.5100
2.30	.9995	.9995	1.6720	1.9977	2.0384	1.7970

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.0312	.6141	-.4071	.0920	.1544	.1106

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.2209	.2168	-.1215

TABLE I-D-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .60 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.4000	.1000	-199.9999	-79.9999	-20.0000	.0000
-1.00	.4472	.1708	-69.0925	-27.5158	-6.7274	.0991
-.90	.4609	.1914	-68.7737	-27.3712	-6.6699	.1136
-.80	.4774	.2160	-68.5102	-27.2477	-6.6164	.1294
-.70	.4967	.2450	-68.2882	-27.1397	-6.5654	.1464
-.60	.5188	.2783	-68.0975	-27.0430	-6.5157	.1650
-.50	.5438	.3158	-67.9304	-26.9543	-6.4662	.1853
-.40	.5715	.3572	-67.7813	-26.8711	-6.4161	.2078
-.36	.5832	.3748	-67.7256	-26.8390	-6.3957	.2174
-.32	.5953	.3929	-67.6719	-26.8074	-6.3751	.2275
-.28	.6076	.4115	-67.6199	-26.7761	-6.3542	.2380
-.24	.6203	.4304	-67.5694	-26.7451	-6.3330	.2489
-.20	.6332	.4498	-67.5204	-26.7144	-6.3114	.2603
-.16	.6463	.4694	-67.4725	-26.6838	-6.2894	.2722
-.12	.6596	.4894	-67.4258	-26.6533	-6.2670	.2847
-.08	.6730	.5095	-67.3800	-26.6228	-6.2441	.2977
-.04	.6865	.5297	-67.3352	-26.5923	-6.2208	.3112
.00	.7000	.5500	-67.2911	-26.5617	-6.1970	.3254
.04	.7135	.5703	-67.2476	-26.5310	-6.1727	.3401
.08	.7270	.5905	-67.2048	-26.5002	-6.1478	.3555
.12	.7404	.6106	-67.1625	-26.4691	-6.1224	.3715
.16	.7537	.6306	-67.1207	-26.4379	-6.0965	.3881
.20	.7668	.6502	-67.0792	-26.4064	-6.0699	.4054
.24	.7797	.6696	-67.0381	-26.3746	-6.0428	.4234
.28	.7924	.6886	-66.9974	-26.3425	-6.0151	.4421
.32	.8047	.7071	-66.9568	-26.3102	-5.9868	.4615
.36	.8168	.7252	-66.9165	-26.2775	-5.9580	.4815
.40	.8285	.7428	-66.8764	-26.2445	-5.9285	.5023
.50	.8562	.7842	-66.7766	-26.1604	-5.8523	.5571
.60	.8812	.8217	-66.6774	-26.0742	-5.7726	.6162
.70	.9033	.8550	-66.5784	-25.9859	-5.6896	.6792
.80	.9226	.8840	-66.4796	-25.8956	-5.6036	.7458
.90	.9391	.9086	-66.3806	-25.8035	-5.5149	.8157
1.00	.9528	.9292	-66.2816	-25.7098	-5.4239	.8886
1.50	.9898	.9847	-65.7842	-25.2248	-4.9451	1.2819
2.00	.9986	.9979	-65.2847	-24.7277	-4.4491	1.6969
2.24	.9995	.9993	-65.0448	-24.4879	-4.2095	1.8980

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
-.2602	.6139	-67.5948	-26.7608	-6.3437	.2433

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
-.3100	.4619	-.5519

TABLE I-E-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .80 PHI B = .00

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.0000	.1000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	.1708	.0376	.0015	.0051	.0001
-.90	.1015	.1914	.0479	.0024	.0069	.0002
-.80	.1289	.2160	.0598	.0038	.0094	.0003
-.70	.1611	.2450	.0734	.0057	.0125	.0006
-.60	.1981	.2783	.0886	.0085	.0165	.0011
-.50	.2397	.3158	.1055	.0122	.0215	.0019
-.40	.2858	.3572	.1241	.0171	.0278	.0032
-.36	.3053	.3748	.1321	.0194	.0307	.0039
-.32	.3254	.3929	.1404	.0220	.0339	.0047
-.28	.3461	.4115	.1490	.0249	.0373	.0057
-.24	.3671	.4304	.1580	.0281	.0411	.0068
-.20	.3886	.4498	.1672	.0316	.0452	.0082
-.16	.4105	.4694	.1769	.0355	.0496	.0097
-.12	.4326	.4894	.1869	.0397	.0544	.0115
-.08	.4550	.5095	.1972	.0443	.0596	.0135
-.04	.4774	.5297	.2080	.0493	.0652	.0159
.00	.5000	.5500	.2192	.0548	.0713	.0186
.04	.5226	.5703	.2309	.0608	.0778	.0216
.08	.5450	.5905	.2430	.0673	.0848	.0251
.12	.5674	.6106	.2556	.0743	.0924	.0290
.16	.5895	.6306	.2687	.0818	.1005	.0333
.20	.6114	.6502	.2824	.0900	.1093	.0383
.24	.6329	.6696	.2966	.0989	.1187	.0438
.28	.6539	.6886	.3114	.1084	.1287	.0499
.32	.6746	.7071	.3268	.1187	.1395	.0567
.36	.6947	.7252	.3429	.1296	.1510	.0642
.40	.7142	.7428	.3596	.1414	.1633	.0725
.50	.7603	.7842	.4045	.1746	.1976	.0970
.60	.8019	.8217	.4542	.2134	.2375	.1274
.70	.8389	.8550	.5090	.2584	.2835	.1644
.80	.8711	.8840	.5692	.3099	.3359	.2084
.90	.8985	.9086	.6348	.3680	.3947	.2599
1.00	.9214	.9292	.7059	.4327	.4600	.3188
1.50	.9831	.9847	1.1285	.8382	.8673	.7080
2.00	.9977	.9979	1.6120	1.3181	1.3475	1.1842
2.34	.9995	.9996	1.9502	1.6559	1.6853	1.5216

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.2336	.6294	.2943	.0975	.1171	.0429

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.6841	.0975	.1472

TABLE I-E-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .10 C_A^2 = .80 PHI B = .20

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.2000	.1000	-2.9412	-.5882	-.2941	.0000
-1.00	.2629	.1708	-.6448	-.1189	-.0531	.0044
-.90	.2812	.1914	-.6001	-.1067	-.0450	.0059
-.80	.3032	.2160	-.5569	-.0941	-.0363	.0078
-.70	.3289	.2450	-.5149	-.0808	-.0266	.0103
-.60	.3585	.2783	-.4737	-.0667	-.0158	.0135
-.50	.3918	.3158	-.4330	-.0515	-.0038	.0176
-.40	.4286	.3572	-.3923	-.0348	.0099	.0229
-.36	.4443	.3748	-.3760	-.0277	.0159	.0253
-.32	.4603	.3929	-.3596	-.0202	.0222	.0280
-.28	.4768	.4115	-.3430	-.0125	.0288	.0310
-.24	.4937	.4304	-.3263	-.0044	.0359	.0343
-.20	.5109	.4498	-.3095	.0041	.0433	.0378
-.16	.5284	.4694	-.2924	.0130	.0511	.0418
-.12	.5461	.4894	-.2751	.0223	.0594	.0461
-.08	.5640	.5095	-.2575	.0320	.0682	.0508
-.04	.5820	.5297	-.2397	.0422	.0775	.0559
.00	.6000	.5500	-.2215	.0530	.0873	.0615
.04	.6180	.5703	-.2030	.0642	.0976	.0677
.08	.6360	.5905	-.1842	.0761	.1086	.0743
.12	.6539	.6106	-.1649	.0885	.1202	.0816
.16	.6716	.6306	-.1452	.1015	.1324	.0894
.20	.6891	.6502	-.1250	.1153	.1453	.0980
.24	.7063	.6696	-.1044	.1297	.1589	.1072
.28	.7232	.6886	-.0833	.1448	.1733	.1171
.32	.7397	.7071	-.0616	.1606	.1884	.1279
.36	.7557	.7252	-.0393	.1773	.2044	.1394
.40	.7714	.7428	-.0165	.1947	.2211	.1518
.50	.8082	.7842	.0433	.2420	.2668	.1868
.60	.8415	.8217	.1071	.2947	.3181	.2277
.70	.8711	.8550	.1752	.3530	.3752	.2750
.80	.8968	.8840	.2477	.4171	.4382	.3288
.90	.9188	.9086	.3244	.4867	.5070	.3890
1.00	.9371	.9292	.4051	.5617	.5812	.4553
1.50	.9864	.9847	.8557	.9976	1.0153	.8590
2.00	.9981	.9979	1.3457	1.4845	1.5019	1.3234
2.30	.9995	.9995	1.6447	1.7832	1.8005	1.6098

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.1029	.6463	-.1732	.0831	.1152	.0784

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.4822	.1472	-.1553

TABLE I-F-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA = .10 C_A^2 = .90 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	.1000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	.1708	.0188	.0007	.0025	.0000
-.90	.1015	.1914	.0240	.0012	.0035	.0001
-.80	.1289	.2160	.0300	.0019	.0047	.0002
-.70	.1611	.2450	.0368	.0029	.0063	.0003
-.60	.1981	.2783	.0445	.0043	.0083	.0006
-.50	.2397	.3158	.0532	.0062	.0109	.0010
-.40	.2858	.3572	.0627	.0087	.0141	.0016
-.36	.3053	.3748	.0668	.0099	.0156	.0020
-.32	.3254	.3929	.0711	.0112	.0172	.0024
-.28	.3461	.4115	.0756	.0127	.0190	.0029
-.24	.3671	.4304	.0802	.0144	.0210	.0035
-.20	.3886	.4498	.0851	.0162	.0231	.0042
-.16	.4105	.4694	.0902	.0183	.0254	.0050
-.12	.4326	.4894	.0954	.0205	.0280	.0060
-.08	.4550	.5095	.1009	.0229	.0307	.0070
-.04	.4774	.5297	.1067	.0256	.0337	.0083
.00	.5000	.5500	.1127	.0286	.0370	.0097
.04	.5226	.5703	.1190	.0318	.0405	.0114
.08	.5450	.5905	.1256	.0353	.0443	.0133
.12	.5674	.6106	.1325	.0391	.0485	.0154
.16	.5895	.6306	.1398	.0433	.0530	.0178
.20	.6114	.6502	.1474	.0479	.0578	.0206
.24	.6329	.6696	.1554	.0529	.0631	.0237
.28	.6539	.6886	.1638	.0583	.0688	.0271
.32	.6746	.7071	.1726	.0641	.0750	.0310
.36	.6947	.7252	.1819	.0705	.0817	.0354
.40	.7142	.7428	.1917	.0774	.0889	.0403
.50	.7603	.7842	.2186	.0973	.1094	.0550
.60	.8019	.8217	.2495	.1214	.1342	.0738
.70	.8389	.8550	.2849	.1505	.1639	.0977
.80	.8711	.8840	.3254	.1852	.1992	.1274
.90	.8985	.9086	.3717	.2262	.2407	.1637
1.00	.9214	.9292	.4242	.2740	.2890	.2072
1.50	.9831	.9847	.7822	.6178	.6343	.5376
2.00	.9977	.9979	1.2473	1.0795	1.0963	.9958
2.34	.9995	.9996	1.5834	1.4151	1.4319	1.3310

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.3006	.6646	.1682	.0612	.0719	.0291

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.9249	.0612	.1682

TABLE I-F-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA = .10 C_A^2 = .90 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	.1000	-1.5625	-.3125	-.1562	.0000
-1.00	.2629	.1708	-.3427	-.0632	-.0282	.0023
-.90	.2812	.1914	-.3189	-.0567	-.0239	.0031
-.80	.3032	.2160	-.2959	-.0500	-.0193	.0042
-.70	.3289	.2450	-.2734	-.0429	-.0141	.0055
-.60	.3585	.2783	-.2512	-.0353	-.0083	.0072
-.50	.3918	.3158	-.2292	-.0270	-.0018	.0095
-.40	.4286	.3572	-.2070	-.0179	.0057	.0123
-.36	.4443	.3748	-.1981	-.0140	.0090	.0136
-.32	.4603	.3929	-.1890	-.0099	.0125	.0151
-.28	.4768	.4115	-.1798	-.0056	.0161	.0168
-.24	.4937	.4304	-.1705	-.0011	.0201	.0186
-.20	.5109	.4498	-.1611	.0036	.0242	.0206
-.16	.5284	.4694	-.1515	.0086	.0286	.0228
-.12	.5461	.4894	-.1417	.0139	.0333	.0252
-.08	.5640	.5095	-.1317	.0194	.0383	.0279
-.04	.5820	.5297	-.1215	.0253	.0436	.0309
.00	.6000	.5500	-.1110	.0315	.0493	.0341
.04	.6180	.5703	-.1003	.0380	.0553	.0377
.08	.6360	.5905	-.0892	.0450	.0617	.0416
.12	.6539	.6106	-.0778	.0523	.0686	.0459
.16	.6716	.6306	-.0660	.0601	.0759	.0506
.20	.6891	.6502	-.0538	.0684	.0837	.0557
.24	.7063	.6696	-.0413	.0772	.0920	.0614
.28	.7232	.6886	-.0282	.0865	.1008	.0675
.32	.7397	.7071	-.0147	.0964	.1103	.0742
.36	.7557	.7252	-.0006	.1069	.1203	.0815
.40	.7714	.7428	.0139	.1180	.1311	.0894
.50	.8082	.7842	.0531	.1490	.1610	.1123
.60	.8415	.8217	.0965	.1848	.1958	.1401
.70	.8711	.8550	.1446	.2260	.2362	.1735
.80	.8968	.8840	.1979	.2732	.2826	.2131
.90	.9188	.9086	.2567	.3266	.3353	.2593
1.00	.9371	.9292	.3213	.3866	.3947	.3124
1.50	.9864	.9847	.7222	.7746	.7811	.6720
2.00	.9981	.9979	1.1999	1.2494	1.2556	1.1248
2.30	.9995	.9995	1.4975	1.5467	1.5529	1.4099

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.1749	.6782	-.0615	.0632	.0788	.0525

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.7410	.0943	-.1876

TABLE II-A-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .00 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	.5000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	.5393	.0482	.0020	.0251	.0001
-.90	.1015	.5508	.0647	.0035	.0341	.0002
-.80	.1289	.5645	.0853	.0059	.0456	.0005
-.70	.1611	.5805	.1106	.0095	.0601	.0011
-.60	.1981	.5990	.1409	.0150	.0780	.0020
-.50	.2397	.6199	.1768	.0229	.0998	.0038
-.40	.2858	.6429	.2184	.0338	.1261	.0066
-.36	.3053	.6527	.2366	.0392	.1379	.0082
-.32	.3254	.6627	.2558	.0452	.1505	.0102
-.28	.3461	.6730	.2759	.0520	.1639	.0124
-.24	.3671	.6836	.2969	.0595	.1782	.0151
-.20	.3886	.6943	.3188	.0678	.1933	.0182
-.16	.4105	.7052	.3417	.0769	.2093	.0219
-.12	.4326	.7163	.3654	.0869	.2262	.0261
-.08	.4550	.7275	.3900	.0978	.2439	.0309
-.04	.4774	.7387	.4154	.1097	.2626	.0365
.00	.5000	.7500	.4417	.1225	.2821	.0428
.04	.5226	.7613	.4688	.1364	.3026	.0498
.08	.5450	.7725	.4966	.1512	.3239	.0578
.12	.5674	.7837	.5252	.1671	.3462	.0666
.16	.5895	.7948	.5545	.1841	.3693	.0764
.20	.6114	.8057	.5845	.2021	.3933	.0873
.24	.6329	.8164	.6152	.2212	.4182	.0991
.28	.6539	.8270	.6465	.2414	.4439	.1121
.32	.6746	.8373	.6784	.2626	.4705	.1262
.36	.6947	.8473	.7110	.2848	.4979	.1414
.40	.7142	.8571	.7440	.3081	.5261	.1579
.50	.7603	.8801	.8289	.3708	.5998	.2041
.60	.8019	.9010	.9166	.4393	.6780	.2577
.70	.8389	.9195	1.0068	.5133	.7601	.3184
.80	.8711	.9355	1.0990	.5922	.8456	.3859
.90	.8985	.9492	1.1929	.6753	.9341	.4595
1.00	.9214	.9607	1.2882	.7621	1.0251	.5385
1.50	.9831	.9915	1.7775	1.2311	1.5043	.9882
2.00	.9977	.9988	2.2756	1.7254	2.0005	1.4787
2.34	.9995	.9998	2.6154	2.0648	2.3401	1.8177

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.1548	.5866	.5506	.1818	.3662	.0751

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.2752	.1818	.2753

TABLE II-A-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .00 PHI B = .20

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.2000	.5000	-2.0000	-.4000	-1.0000	.0000
-1.00	.2629	.5393	-.3711	-.0652	-.1799	.0039
-.90	.2812	.5508	-.3212	-.0516	-.1527	.0056
-.80	.3032	.5645	-.2688	-.0364	-.1235	.0080
-.70	.3289	.5805	-.2137	-.0189	-.0920	.0113
-.60	.3585	.5990	-.1554	.0011	-.0576	.0158
-.50	.3918	.6199	-.0939	.0241	-.0201	.0220
-.40	.4286	.6429	-.0290	.0508	.0209	.0304
-.36	.4443	.6527	-.0020	.0625	.0383	.0344
-.32	.4603	.6627	.0255	.0750	.0564	.0389
-.28	.4768	.6730	.0535	.0881	.0751	.0440
-.24	.4937	.6836	.0821	.1020	.0946	.0496
-.20	.5109	.6943	.1113	.1167	.1147	.0558
-.16	.5284	.7052	.1410	.1321	.1354	.0626
-.12	.5461	.7163	.1712	.1483	.1569	.0701
-.08	.5640	.7275	.2020	.1654	.1791	.0784
-.04	.5820	.7387	.2333	.1833	.2020	.0874
.00	.6000	.7500	.2650	.2021	.2257	.0972
.04	.6180	.7613	.2973	.2217	.2500	.1079
.08	.6360	.7725	.3300	.2422	.2751	.1194
.12	.6539	.7837	.3631	.2636	.3009	.1319
.16	.6716	.7948	.3967	.2859	.3274	.1453
.20	.6891	.8057	.4307	.3090	.3547	.1597
.24	.7063	.8164	.4651	.3330	.3826	.1751
.28	.7232	.8270	.4999	.3579	.4111	.1915
.32	.7397	.8373	.5351	.3836	.4404	.2089
.36	.7557	.8473	.5706	.4102	.4703	.2273
.40	.7714	.8571	.6064	.4375	.5009	.2468
.50	.8082	.8801	.6973	.5094	.5799	.2999
.60	.8415	.9010	.7900	.5858	.6624	.3593
.70	.8711	.9195	.8841	.6664	.7480	.4246
.80	.8968	.9355	.9794	.7507	.8365	.4953
.90	.9188	.9492	1.0757	.8382	.9273	.5709
1.00	.9371	.9607	1.1729	.9284	1.0201	.6508
1.50	.9864	.9915	1.6665	1.4056	1.5035	1.0925
2.00	.9981	.9988	2.1654	1.9014	2.0004	1.5653
2.30	.9995	.9997	2.4652	2.2010	2.3001	1.8526

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.0804	.6362	.3303	.2425	.2754	.1196

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.1651	.2205	.1321

TABLE II-A-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .CO PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.CO	.4000	.5000	-4.0000	-1.6000	-2.0000	.0000
-1.CO	.4472	.5393	-.7903	-.3038	-.3849	.0102
-.90	.4609	.5508	-.7071	-.2660	-.3395	.0140
-.80	.4774	.5645	-.6229	-.2266	-.2926	.0190
-.70	.4967	.5805	-.5379	-.1852	-.2440	.0256
-.60	.5188	.5990	-.4518	-.1415	-.1932	.0340
-.50	.5438	.6199	-.3646	-.0952	-.1401	.0446
-.40	.5715	.6429	-.2763	-.0460	-.0844	.0580
-.36	.5832	.6527	-.2407	-.0254	-.0613	.0641
-.32	.5953	.6627	-.2048	-.0043	-.0377	.0708
-.28	.6076	.6730	-.1688	.0174	-.0136	.0781
-.24	.6203	.6836	-.1326	.0396	.0109	.0860
-.20	.6332	.6943	-.0962	.0624	.0360	.0944
-.16	.6463	.7052	-.0597	.0858	.0616	.1036
-.12	.6596	.7163	-.0229	.1098	.0877	.1133
-.08	.6730	.7275	.0140	.1344	.1143	.1238
-.04	.6865	.7387	.0511	.1596	.1415	.1350
.CO	.7000	.7500	.0883	.1854	.1693	.1470
.04	.7135	.7613	.1258	.2119	.1975	.1597
.08	.7270	.7725	.1633	.2390	.2263	.1732
.12	.7404	.7837	.2010	.2666	.2557	.1874
.16	.7537	.7948	.2389	.2949	.2856	.2025
.20	.7668	.8057	.2769	.3238	.3160	.2184
.24	.7797	.8164	.3150	.3533	.3469	.2351
.28	.7924	.8270	.3533	.3834	.3784	.2526
.32	.8047	.8373	.3917	.4140	.4103	.2710
.36	.8168	.8473	.4302	.4452	.4427	.2901
.40	.8285	.8571	.4688	.4770	.4756	.3101
.50	.8562	.8801	.5658	.5587	.5599	.3634
.60	.8812	.9010	.6633	.6435	.6468	.4214
.70	.9033	.9195	.7614	.7310	.7360	.4838
.80	.9226	.9355	.8598	.8209	.8274	.5502
.90	.9391	.9492	.9586	.9128	.9205	.6200
1.00	.9528	.9607	1.0576	1.0066	1.0151	.6929
1.50	.9898	.9915	1.5555	1.4920	1.5026	1.0866
2.00	.9986	.9988	2.0551	1.9893	2.0003	1.5017
2.24	.9995	.9996	2.2951	2.2291	2.2401	1.7028

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.0232	.7078	.1100	.2007	.1856	.1542

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.0549	.2612	.0330

TABLE II-A-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .00 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	.5000	-6.0000	-3.6000	-3.0000	.0000
-1.00	.6315	.5393	-1.2096	-.7139	-.5899	.0145
-.90	.6406	.5508	-1.0929	-.6397	-.5264	.0197
-.80	.6516	.5645	-.9771	-.5648	-.4618	.0263
-.70	.6644	.5805	-.8621	-.4892	-.3960	.0347
-.60	.6792	.5990	-.7482	-.4127	-.3288	.0450
-.50	.6959	.6199	-.6354	-.3351	-.2601	.0577
-.40	.7143	.6429	-.5237	-.2564	-.1896	.0730
-.36	.7221	.6527	-.4793	-.2245	-.1608	.0800
-.32	.7302	.6627	-.4351	-.1925	-.1318	.0873
-.28	.7384	.6730	-.3912	-.1602	-.1024	.0952
-.24	.7469	.6836	-.3474	-.1277	-.0727	.1036
-.20	.7555	.6943	-.3038	-.0949	-.0427	.1125
-.16	.7642	.7052	-.2603	-.0619	-.0123	.1220
-.12	.7730	.7163	-.2171	-.0286	.0185	.1319
-.08	.7820	.7275	-.1740	.0049	.0496	.1425
-.04	.7910	.7387	-.1311	.0386	.0810	.1536
.00	.8000	.7500	-.0883	.0726	.1128	.1652
.04	.8090	.7613	-.0457	.1069	.1450	.1775
.08	.8180	.7725	-.0033	.1414	.1776	.1903
.12	.8270	.7837	.0390	.1762	.2105	.2036
.16	.8358	.7948	.0811	.2112	.2437	.2176
.20	.8445	.8057	.1231	.2465	.2773	.2321
.24	.8531	.8164	.1650	.2820	.3113	.2472
.28	.8616	.8270	.2067	.3178	.3456	.2629
.32	.8698	.8373	.2483	.3538	.3802	.2791
.36	.8779	.8473	.2898	.3901	.4152	.2958
.40	.8857	.8571	.3312	.4266	.4504	.3131
.50	.9041	.8801	.4342	.5188	.5399	.3586
.60	.9208	.9010	.5367	.6123	.6312	.4070
.70	.9356	.9195	.6386	.7069	.7240	.4582
.80	.9484	.9355	.7402	.8026	.8182	.5118
.90	.9594	.9492	.8414	.8992	.9136	.5675
1.00	.9685	.9607	.9424	.9965	1.0101	.6249
1.50	.9932	.9915	1.4445	1.4903	1.5017	.9297
2.00	.9991	.9988	1.9449	1.9891	2.0002	1.2469
2.16	.9995	.9994	2.1049	2.1491	2.1601	1.3491

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
-.0206	.7953	-.1103	.0550	.0964	.1591

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
-.0553	.3031	-.0220

TABLE II-B-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .20 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	.5000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	.5393	.0386	.0016	.0201	.0001
-.90	.1015	.5508	.0518	.0028	.0273	.0002
-.80	.1289	.5645	.0664	.0047	.0366	.0004
-.70	.1611	.5805	.0888	.0077	.0482	.0008
-.60	.1981	.5990	.1133	.0121	.0627	.0016
-.50	.2397	.6199	.1425	.0185	.0805	.0030
-.40	.2858	.6429	.1765	.0274	.1019	.0054
-.36	.3053	.6527	.1915	.0319	.1117	.0067
-.32	.3254	.6627	.2073	.0368	.1221	.0083
-.28	.3461	.6730	.2239	.0424	.1332	.0102
-.24	.3671	.6836	.2414	.0487	.1450	.0124
-.20	.3886	.6943	.2597	.0556	.1577	.0150
-.16	.4105	.7052	.2789	.0632	.1711	.0181
-.12	.4326	.7163	.2988	.0717	.1853	.0216
-.08	.4550	.7275	.3196	.0809	.2003	.0257
-.04	.4774	.7387	.3413	.0910	.2161	.0304
.00	.5000	.7500	.3637	.1020	.2328	.0358
.04	.5226	.7613	.3870	.1139	.2504	.0419
.08	.5450	.7725	.4110	.1267	.2689	.0487
.12	.5674	.7837	.4359	.1405	.2882	.0564
.16	.5895	.7948	.4615	.1554	.3084	.0650
.20	.6114	.8057	.4879	.1712	.3296	.0745
.24	.6329	.8164	.5150	.1881	.3516	.0850
.28	.6539	.8270	.5429	.2060	.3745	.0966
.32	.6746	.8373	.5715	.2250	.3982	.1092
.36	.6947	.8473	.6008	.2450	.4229	.1229
.40	.7142	.8571	.6307	.2661	.4484	.1378
.50	.7603	.8801	.7083	.3234	.5159	.1801
.60	.8019	.9010	.7897	.3870	.5883	.2298
.70	.8389	.9195	.8743	.4565	.6654	.2868
.80	.8711	.9355	.9619	.5314	.7467	.3509
.90	.8985	.9492	1.0520	.6112	.8316	.4215
1.00	.9214	.9607	1.1443	.6951	.9197	.4980
1.50	.9831	.9915	1.6262	1.1571	1.3917	.9410
2.00	.9977	.9988	2.1228	1.6500	1.8864	1.4301
2.34	.9995	.9998	2.4625	1.9892	2.2259	1.7690

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.1779	.5993	.4732	.1623	.3178	.0692

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.3508	.1623	.2958

TABLE II-B-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .20 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	.5000	-1.6260	-.3252	-.8130	.0000
-1.00	.2629	.5393	-.3006	-.0527	-.1457	.0032
-.90	.2812	.5508	-.2595	-.0416	-.1233	.0046
-.80	.3032	.5645	-.2163	-.0290	-.0992	.0066
-.70	.3289	.5805	-.1706	-.0145	-.0731	.0093
-.60	.3585	.5990	-.1221	.0021	-.0445	.0131
-.50	.3918	.6199	-.0705	.0215	-.0130	.0183
-.40	.4286	.6429	-.0156	.0440	.0216	.0253
-.36	.4443	.6527	.0073	.0540	.0365	.0288
-.32	.4603	.6627	.0307	.0646	.0519	.0326
-.28	.4768	.6730	.0548	.0759	.0679	.0369
-.24	.4937	.6836	.0794	.0878	.0846	.0418
-.20	.5109	.6943	.1045	.1004	.1020	.0471
-.16	.5284	.7052	.1303	.1138	.1200	.0530
-.12	.5461	.7163	.1566	.1280	.1387	.0596
-.08	.5640	.7275	.1835	.1429	.1581	.0668
-.04	.5820	.7387	.2110	.1586	.1783	.0747
.00	.6000	.7500	.2390	.1752	.1991	.0834
.04	.6180	.7613	.2676	.1926	.2207	.0928
.08	.6360	.7725	.2968	.2109	.2431	.1031
.12	.6539	.7837	.3265	.2301	.2662	.1143
.16	.6716	.7948	.3567	.2501	.2901	.1264
.20	.6891	.8057	.3875	.2710	.3147	.1394
.24	.7063	.8164	.4188	.2929	.3401	.1534
.28	.7232	.8270	.4505	.3156	.3662	.1684
.32	.7397	.8373	.4828	.3392	.3931	.1843
.36	.7557	.8473	.5156	.3637	.4206	.2013
.40	.7714	.8571	.5488	.3891	.4490	.2194
.50	.8082	.8801	.6337	.4562	.5228	.2690
.60	.8415	.9010	.7212	.5284	.6007	.3251
.70	.8711	.9195	.8110	.6053	.6824	.3874
.80	.8968	.9355	.9027	.6864	.7675	.4555
.90	.9188	.9492	.9961	.7712	.8556	.5288
1.00	.9371	.9607	1.0910	.8593	.9462	.6067
1.50	.9864	.9915	1.5790	1.3311	1.4241	1.0435
2.00	.9981	.9988	2.0768	1.8259	1.9200	1.5154
2.30	.9995	.9997	2.3766	2.1254	2.2196	1.8025

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.1034	.6465	.3141	.2220	.2565	.1096

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.2374	.1990	.1457

TABLE II-B-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .20 PHI B = .40

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.4000	.5000	-3.4188	-1.3675	-1.7094	.0000
-1.00	.4472	.5393	-.6731	-.2587	-.3277	.0087
-.90	.4609	.5508	-.6010	-.2259	-.2885	.0120
-.80	.4774	.5645	-.5279	-.1917	-.2477	.0164
-.70	.4967	.5805	-.4538	-.1556	-.2053	.0221
-.60	.5188	.5990	-.3783	-.1173	-.1608	.0295
-.50	.5438	.6199	-.3015	-.0764	-.1139	.0389
-.40	.5715	.6429	-.2231	-.0328	-.0645	.0507
-.36	.5832	.6527	-.1913	-.0144	-.0439	.0562
-.32	.5953	.6627	-.1592	.0045	-.0228	.0622
-.28	.6076	.6730	-.1269	.0239	-.0012	.0688
-.24	.6203	.6836	-.0943	.0439	.0209	.0758
-.20	.6332	.6943	-.0615	.0645	.0435	.0835
-.16	.6463	.7052	-.0284	.0857	.0667	.0917
-.12	.6596	.7163	.0051	.1075	.0904	.1006
-.08	.6730	.7275	.0387	.1300	.1148	.1102
-.04	.6865	.7387	.0727	.1530	.1396	.1204
.00	.7000	.7500	.1069	.1768	.1651	.1314
.04	.7135	.7613	.1414	.2011	.1912	.1431
.08	.7270	.7725	.1761	.2262	.2178	.1556
.12	.7404	.7837	.2112	.2519	.2451	.1689
.16	.7537	.7948	.2464	.2782	.2729	.1829
.20	.7668	.8057	.2820	.3052	.3014	.1978
.24	.7797	.8164	.3178	.3329	.3304	.2134
.28	.7924	.8270	.3538	.3612	.3600	.2299
.32	.8047	.8373	.3901	.3902	.3902	.2473
.36	.8168	.8473	.4266	.4198	.4209	.2654
.40	.8285	.8571	.4633	.4500	.4522	.2844
.50	.8562	.8801	.5560	.5281	.5328	.3354
.60	.8812	.9010	.6500	.6098	.6165	.3913
.70	.9033	.9195	.7450	.6946	.7030	.4518
.80	.9226	.9355	.8411	.7823	.7921	.5165
.90	.9391	.9492	.9379	.8725	.8834	.5850
1.00	.9528	.9607	1.0354	.9648	.9765	.6567
1.50	.9898	.9915	1.5297	1.4467	1.4605	1.0476
2.00	.9986	.9988	2.0287	1.9434	1.9576	1.4622
2.24	.9995	.9996	2.2686	2.1831	2.1973	1.6633

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.0413	.7140	.1425	.2019	.1920	.1435

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.1139	.2415	.0378

TABLE II-B-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .20 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	.5000	-5.6075	-3.3645	-2.8037	.0000
-1.00	.6315	.5393	-1.1289	-.6662	-.5505	.0136
-.90	.6406	.5508	-1.0193	-.5965	-.4908	.0184
-.80	.6516	.5645	-.9103	-.5261	-.4300	.0247
-.70	.6644	.5805	-.8019	-.4548	-.3680	.0326
-.60	.6792	.5990	-.6943	-.3825	-.3046	.0424
-.50	.6959	.6199	-.5875	-.3091	-.2395	.0544
-.40	.7143	.6429	-.4814	-.2343	-.1725	.0689
-.36	.7221	.6527	-.4392	-.2040	-.1452	.0755
-.32	.7302	.6627	-.3971	-.1734	-.1175	.0825
-.28	.7384	.6730	-.3552	-.1426	-.0895	.0901
-.24	.7469	.6836	-.3133	-.1116	-.0611	.0981
-.20	.7555	.6943	-.2716	-.0802	-.0324	.1066
-.16	.7642	.7052	-.2300	-.0486	-.0033	.1156
-.12	.7730	.7163	-.1885	-.0167	.0262	.1252
-.08	.7820	.7275	-.1471	.0155	.0561	.1353
-.04	.7910	.7387	-.1058	.0480	.0864	.1460
.00	.8000	.7500	-.0646	.0807	.1171	.1573
.04	.8090	.7613	-.0235	.1138	.1481	.1691
.08	.8180	.7725	.0175	.1472	.1796	.1814
.12	.8270	.7837	.0585	.1809	.2115	.1944
.16	.8358	.7948	.0994	.2148	.2437	.2079
.20	.8445	.8057	.1401	.2491	.2764	.2220
.24	.8531	.8164	.1809	.2837	.3094	.2367
.28	.8616	.8270	.2215	.3186	.3428	.2520
.32	.8698	.8373	.2621	.3537	.3766	.2678
.36	.8779	.8473	.3027	.3891	.4108	.2842
.40	.8857	.8571	.3432	.4249	.4453	.3011
.50	.9041	.8801	.4442	.5153	.5331	.3457
.60	.9208	.9010	.5451	.6073	.6229	.3933
.70	.9356	.9195	.6457	.7007	.7145	.4438
.80	.9484	.9355	.7462	.7954	.8077	.4968
.90	.9594	.9492	.8465	.8911	.9023	.5521
1.00	.9685	.9607	.9468	.9878	.9980	.6092
1.50	.9932	.9915	1.4474	1.4800	1.4882	.9130
2.00	.9991	.9988	1.9475	1.9786	1.9864	1.2300
2.16	.9995	.9994	2.1075	2.1385	2.1462	1.3322

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
-.0126	.7972	-.0776	.0704	.1074	.1537

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
-.0250	.2923	-.0265

TABLE II-C-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .40 PHI B = .00

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.0000	.5000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	.5393	.0290	.0012	.0151	.0001
-.90	.1015	.5508	.0389	.0021	.0205	.0001
-.80	.1289	.5645	.0514	.0036	.0275	.0003
-.70	.1611	.5805	.0668	.0058	.0363	.0006
-.60	.1981	.5990	.0854	.0091	.0473	.0012
-.50	.2397	.6199	.1076	.0140	.0608	.0023
-.40	.2858	.6429	.1337	.0209	.0773	.0041
-.36	.3053	.6527	.1453	.0243	.0848	.0051
-.32	.3254	.6627	.1575	.0282	.0928	.0064
-.28	.3461	.6730	.1705	.0325	.1015	.0078
-.24	.3671	.6836	.1841	.0374	.1107	.0096
-.20	.3886	.6943	.1985	.0428	.1206	.0116
-.16	.4105	.7052	.2136	.0488	.1312	.0140
-.12	.4326	.7163	.2294	.0555	.1424	.0168
-.08	.4550	.7275	.2459	.0628	.1544	.0201
-.04	.4774	.7387	.2632	.0709	.1671	.0239
.00	.5000	.7500	.2813	.0797	.1805	.0282
.04	.5226	.7613	.3002	.0894	.1948	.0331
.08	.5450	.7725	.3198	.0999	.2098	.0387
.12	.5674	.7837	.3402	.1112	.2257	.0450
.16	.5895	.7948	.3614	.1235	.2424	.0521
.20	.6114	.8057	.3833	.1367	.2600	.0600
.24	.6329	.8164	.4061	.1508	.2785	.0688
.28	.6539	.8270	.4296	.1660	.2978	.0786
.32	.6746	.8373	.4540	.1821	.3180	.0893
.36	.6947	.8473	.4790	.1993	.3392	.1011
.40	.7142	.8571	.5049	.2175	.3612	.1139
.50	.7603	.8801	.5729	.2677	.4203	.1510
.60	.8019	.9010	.6454	.3244	.4849	.1953
.70	.8389	.9195	.7223	.3875	.5549	.2471
.80	.8711	.9355	.8031	.4566	.6299	.3063
.90	.8985	.9492	.8875	.5313	.7094	.3724
1.00	.9214	.9607	.9751	.6111	.7931	.4450
1.50	.9831	.9915	1.4452	1.0618	1.2535	.8774
2.00	.9977	.9988	1.9395	1.5524	1.7460	1.3642
2.34	.9995	.9998	2.2789	1.8914	2.0852	1.7028

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.2074	.6154	.3875	.1392	.2634	.0616

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.4486	.1392	.3230

TABLE II-C-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .40 PHI B = .20

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.2000	.5000	-1.2397	-.2479	-.6198	.0000
-1.00	.2629	.5393	-.2283	-.0400	-.1106	.0025
-.90	.2812	.5508	-.1966	-.0314	-.0934	.0035
-.80	.3032	.5645	-.1632	-.0216	-.0747	.0050
-.70	.3289	.5805	-.1276	-.0104	-.0543	.0072
-.60	.3585	.5990	-.0896	.0026	-.0319	.0101
-.50	.3918	.6199	-.0490	.0179	-.0072	.0142
-.40	.4286	.6429	-.0053	.0358	.0204	.0198
-.36	.4443	.6527	.0130	.0438	.0322	.0226
-.32	.4603	.6627	.0318	.0523	.0446	.0257
-.28	.4768	.6730	.0512	.0614	.0576	.0292
-.24	.4937	.6836	.0712	.0711	.0711	.0331
-.20	.5109	.6943	.0917	.0814	.0852	.0374
-.16	.5284	.7052	.1127	.0923	.1000	.0423
-.12	.5461	.7163	.1344	.1040	.1154	.0477
-.08	.5640	.7275	.1566	.1163	.1314	.0536
-.04	.5820	.7387	.1795	.1294	.1482	.0602
.00	.6000	.7500	.2030	.1433	.1657	.0675
.04	.6180	.7613	.2270	.1579	.1838	.0755
.08	.6360	.7725	.2517	.1734	.2028	.0842
.12	.6539	.7837	.2770	.1897	.2225	.0937
.16	.6716	.7948	.3029	.2069	.2429	.1040
.20	.6891	.8057	.3295	.2250	.2642	.1153
.24	.7063	.8164	.3567	.2439	.2862	.1274
.28	.7232	.8270	.3844	.2638	.3090	.1405
.32	.7397	.8373	.4128	.2846	.3327	.1546
.36	.7557	.8473	.4418	.3063	.3571	.1696
.40	.7714	.8571	.4715	.3289	.3823	.1857
.50	.8082	.8801	.5480	.3894	.4489	.2305
.60	.8415	.9010	.6281	.4555	.5202	.2818
.70	.8711	.9195	.7114	.5269	.5961	.3396
.80	.8968	.9355	.7977	.6032	.6761	.4037
.90	.9188	.9492	.8866	.6839	.7599	.4735
1.00	.9371	.9607	.9779	.7686	.8471	.5484
1.50	.9864	.9915	1.4570	1.2319	1.3163	.9774
2.00	.9981	.9988	1.9531	1.7250	1.8105	1.4476
2.30	.9995	.9997	2.2527	2.0243	2.1099	1.7346

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.1332	.6598	.2855	.1953	.2292	.0970

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.3329	.1728	.1638

TABLE II-C-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .40 PHI B = .40

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.4000	.5000	-2.7523	-1.1009	-1.3761	.0000
-1.00	.4472	.5393	-.5396	-.2073	-.2627	.0071
-.90	.4609	.5508	-.4807	-.1805	-.2306	.0098
-.80	.4774	.5645	-.4208	-.1524	-.1972	.0134
-.70	.4967	.5805	-.3596	-.1227	-.1622	.0181
-.60	.5188	.5990	-.2970	-.0909	-.1253	.0242
-.50	.5438	.6199	-.2329	-.0568	-.0861	.0320
-.40	.5715	.6429	-.1669	-.0200	-.0445	.0420
-.36	.5832	.6527	-.1399	-.0045	-.0270	.0467
-.32	.5953	.6627	-.1127	.0116	-.0091	.0518
-.28	.6076	.6730	-.0851	.0282	.0093	.0573
-.24	.6203	.6836	-.0572	.0453	.0283	.0634
-.20	.6332	.6943	-.0289	.0631	.0477	.0700
-.16	.6463	.7052	-.0002	.0814	.0678	.0771
-.12	.6596	.7163	.0288	.1003	.0884	.0849
-.08	.6730	.7275	.0581	.1199	.1096	.0932
-.04	.6865	.7387	.0879	.1401	.1314	.1022
.00	.7000	.7500	.1180	.1610	.1539	.1118
.04	.7135	.7613	.1485	.1826	.1769	.1222
.08	.7270	.7725	.1795	.2048	.2006	.1333
.12	.7404	.7837	.2107	.2278	.2250	.1451
.16	.7537	.7948	.2424	.2515	.2500	.1578
.20	.7668	.8057	.2745	.2759	.2756	.1712
.24	.7797	.8164	.3069	.3009	.3019	.1854
.28	.7924	.8270	.3398	.3268	.3289	.2004
.32	.8047	.8373	.3730	.3533	.3566	.2163
.36	.8168	.8473	.4066	.3805	.3849	.2330
.40	.8285	.8571	.4405	.4084	.4138	.2505
.50	.8562	.8801	.5270	.4813	.4889	.2981
.60	.8812	.9010	.6155	.5582	.5678	.3508
.70	.9033	.9195	.7060	.6390	.6502	.4084
.80	.9226	.9355	.7982	.7232	.7357	.4706
.90	.9391	.9492	.8920	.8105	.8241	.5368
1.00	.9528	.9607	.9871	.9005	.9149	.6068
1.50	.9898	.9915	1.4755	1.3768	1.3932	.9931
2.00	.9986	.9988	1.9734	1.8723	1.8892	1.4067
2.24	.9995	.9996	2.2132	2.1119	2.1288	1.6078

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.0662	.7224	.1687	.1971	.1924	.1294

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.1956	.2160	.0444

TABLE II-C-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .40 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	.5000	-5.0562	-3.0337	-2.5281	.0000
-1.00	.6315	.5393	-1.0159	-.5995	-.4954	.0123
-.90	.6406	.5508	-.9163	-.5361	-.4411	.0167
-.80	.6516	.5645	-.8171	-.4720	-.3858	.0224
-.70	.6644	.5805	-.7182	-.4070	-.3292	.0296
-.60	.6792	.5990	-.6197	-.3408	-.2711	.0386
-.50	.6959	.6199	-.5216	-.2734	-.2113	.0496
-.40	.7143	.6429	-.4237	-.2044	-.1496	.0630
-.36	.7221	.6527	-.3847	-.1764	-.1243	.0691
-.32	.7302	.6627	-.3457	-.1480	-.0986	.0756
-.28	.7384	.6730	-.3067	-.1194	-.0726	.0826
-.24	.7469	.6836	-.2678	-.0905	-.0462	.0901
-.20	.7555	.6943	-.2289	-.0613	-.0194	.0980
-.16	.7642	.7052	-.1900	-.0317	.0079	.1065
-.12	.7730	.7163	-.1511	-.0018	.0355	.1154
-.08	.7820	.7275	-.1122	.0284	.0636	.1249
-.04	.7910	.7387	-.0733	.0590	.0920	.1350
.00	.8000	.7500	-.0345	.0899	.1210	.1456
.04	.8090	.7613	.0044	.1212	.1503	.1567
.08	.8180	.7725	.0433	.1528	.1802	.1685
.12	.8270	.7837	.0822	.1848	.2104	.1808
.16	.8358	.7948	.1211	.2171	.2411	.1937
.20	.8445	.8057	.1600	.2498	.2723	.2072
.24	.8531	.8164	.1990	.2829	.3039	.2212
.28	.8616	.8270	.2380	.3164	.3359	.2358
.32	.8698	.8373	.2770	.3501	.3684	.2510
.36	.8779	.8473	.3161	.3843	.4013	.2668
.40	.8857	.8571	.3552	.4188	.4347	.2831
.50	.9041	.8801	.4531	.5064	.5197	.3263
.60	.9208	.9010	.5513	.5960	.6072	.3728
.70	.9356	.9195	.6498	.6874	.6968	.4222
.80	.9484	.9355	.7485	.7804	.7884	.4743
.90	.9594	.9492	.8474	.8748	.8817	.5287
1.00	.9685	.9607	.9466	.9705	.9764	.5852
1.50	.9932	.9915	1.4446	1.4602	1.4641	.8875
2.00	.9991	.9988	1.9442	1.9583	1.9618	1.2042
2.16	.9995	.9994	2.1042	2.1181	2.1216	1.3064

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
-.0003	.7999	-.0348	.0896	.1207	.1455

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.0210	.2763	-.0332

TABLE II-D-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .60 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	.5000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	.5393	.0193	.0008	.0101	.0000
-.90	.1015	.5508	.0260	.0014	.0137	.0001
-.80	.1289	.5645	.0344	.0024	.0184	.0002
-.70	.1611	.5805	.0447	.0039	.0243	.0004
-.60	.1981	.5990	.0572	.0061	.0317	.0008
-.50	.2397	.6199	.0723	.0094	.0409	.0016
-.40	.2858	.6429	.0901	.0141	.0521	.0028
-.36	.3053	.6527	.0980	.0165	.0573	.0035
-.32	.3254	.6627	.1065	.0191	.0628	.0043
-.28	.3461	.6730	.1154	.0221	.0688	.0053
-.24	.3671	.6836	.1249	.0255	.0752	.0065
-.20	.3886	.6943	.1349	.0293	.0821	.0080
-.16	.4105	.7052	.1455	.0335	.0895	.0097
-.12	.4326	.7163	.1567	.0382	.0975	.0117
-.08	.4550	.7275	.1684	.0435	.1060	.0140
-.04	.4774	.7387	.1808	.0492	.1150	.0167
.00	.5000	.7500	.1938	.0556	.1247	.0198
.04	.5226	.7613	.2075	.0626	.1350	.0234
.08	.5450	.7725	.2218	.0702	.1460	.0274
.12	.5674	.7837	.2368	.0786	.1577	.0321
.16	.5895	.7948	.2526	.0877	.1701	.0374
.20	.6114	.8057	.2690	.0976	.1833	.0433
.24	.6329	.8164	.2862	.1083	.1973	.0500
.28	.6539	.8270	.3042	.1198	.2120	.0574
.32	.6746	.8373	.3229	.1323	.2276	.0657
.36	.6947	.8473	.3424	.1457	.2441	.0748
.40	.7142	.8571	.3628	.1600	.2614	.0849
.50	.7603	.8801	.4172	.2001	.3087	.1146
.60	.8019	.9010	.4768	.2468	.3618	.1510
.70	.8389	.9195	.5417	.3000	.4209	.1948
.80	.8711	.9355	.6118	.3600	.4859	.2461
.90	.8985	.9492	.6867	.4263	.5565	.3048
1.00	.9214	.9607	.7662	.4987	.6325	.3707
1.50	.9831	.9915	1.2147	.9289	1.0718	.7834
2.00	.9977	.9988	1.7044	1.4149	1.5596	1.2657
2.34	.9995	.9998	2.0433	1.7534	1.8983	1.6038

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.2484	.6373	.2900	.1107	.2003	.0515

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.5866	.1107	.3625

TABLE II-D-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .60 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	.5000	-.8403	-.1681	-.4202	.0000
-1.00	.2629	.5393	-.1541	-.0270	-.0747	.0017
-.90	.2812	.5508	-.1324	-.0211	-.0628	.0024
-.80	.3032	.5645	-.1093	-.0143	-.0500	.0035
-.70	.3289	.5805	-.0847	-.0066	-.0359	.0049
-.60	.3585	.5990	-.0582	.0025	-.0202	.0070
-.50	.3918	.6199	-.0297	.0133	-.0028	.0099
-.40	.4286	.6429	.0013	.0259	.0167	.0138
-.36	.4443	.6527	.0143	.0317	.0252	.0158
-.32	.4603	.6627	.0279	.0378	.0341	.0180
-.28	.4768	.6730	.0419	.0443	.0434	.0206
-.24	.4937	.6836	.0563	.0513	.0532	.0234
-.20	.5109	.6943	.0713	.0589	.0635	.0266
-.16	.5284	.7052	.0867	.0669	.0743	.0301
-.12	.5461	.7163	.1027	.0755	.0857	.0341
-.08	.5640	.7275	.1193	.0847	.0976	.0385
-.04	.5820	.7387	.1364	.0945	.1102	.0435
.00	.6000	.7500	.1540	.1049	.1233	.0489
.04	.6180	.7613	.1723	.1160	.1371	.0550
.08	.6360	.7725	.1912	.1279	.1516	.0617
.12	.6539	.7837	.2107	.1405	.1668	.0690
.16	.6716	.7948	.2309	.1539	.1828	.0771
.20	.6891	.8057	.2517	.1680	.1994	.0859
.24	.7063	.8164	.2733	.1830	.2169	.0955
.28	.7232	.8270	.2955	.1989	.2351	.1059
.32	.7397	.8373	.3184	.2157	.2542	.1173
.36	.7557	.8473	.3420	.2333	.2741	.1295
.40	.7714	.8571	.3663	.2519	.2948	.1427
.50	.8082	.8801	.4302	.3024	.3504	.1801
.60	.8415	.9010	.4987	.3589	.4114	.2241
.70	.8711	.9195	.5716	.4214	.4777	.2747
.80	.8968	.9355	.6488	.4897	.5493	.3319
.90	.9188	.9492	.7299	.5633	.6258	.3956
1.00	.9371	.9607	.8147	.6420	.7067	.4653
1.50	.9864	.9915	1.2770	1.0892	1.1597	.8794
2.00	.9981	.9988	1.7697	1.5789	1.6504	1.3463
2.30	.9995	.9997	2.0690	1.8778	1.9495	1.6330

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.1755	.6784	.2389	.1593	.1891	.0804

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.4700	.1394	.1903

TABLE II-D-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .60 PHI B = .40

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.4000	.5000	-1.9802	-.7921	-.9901	.0000
-1.00	.4472	.5393	-.3863	-.1483	-.1880	.0051
-.90	.4609	.5508	-.3432	-.1287	-.1645	.0071
-.80	.4774	.5645	-.2991	-.1081	-.1399	.0098
-.70	.4967	.5805	-.2539	-.0860	-.1140	.0132
-.60	.5188	.5990	-.2072	-.0624	-.0865	.0178
-.50	.5438	.6199	-.1589	-.0367	-.0571	.0237
-.40	.5715	.6429	-.1088	-.0087	-.0254	.0313
-.36	.5832	.6527	-.0882	.0032	-.0121	.0349
-.32	.5953	.6627	-.0672	.0155	.0017	.0388
-.28	.6076	.6730	-.0458	.0284	.0160	.0431
-.24	.6203	.6836	-.0241	.0417	.0307	.0478
-.20	.6332	.6943	-.0020	.0556	.0460	.0530
-.16	.6463	.7052	.0206	.0700	.0617	.0586
-.12	.6596	.7163	.0435	.0850	.0781	.0647
-.08	.6730	.7275	.0669	.1006	.0950	.0713
-.04	.6865	.7387	.0908	.1168	.1125	.0785
.00	.7000	.7500	.1151	.1336	.1306	.0863
.04	.7135	.7613	.1399	.1512	.1493	.0948
.08	.7270	.7725	.1652	.1694	.1687	.1038
.12	.7404	.7837	.1910	.1883	.1888	.1136
.16	.7537	.7948	.2173	.2080	.2095	.1241
.20	.7668	.8057	.2441	.2284	.2310	.1353
.24	.7797	.8164	.2715	.2495	.2532	.1473
.28	.7924	.8270	.2994	.2715	.2761	.1600
.32	.8047	.8373	.3278	.2942	.2998	.1736
.36	.8168	.8473	.3568	.3176	.3242	.1880
.40	.8285	.8571	.3863	.3419	.3493	.2033
.50	.8562	.8801	.4624	.4061	.4154	.2452
.60	.8812	.9010	.5418	.4751	.4862	.2924
.70	.9033	.9195	.6243	.5487	.5613	.3450
.80	.9226	.9355	.7098	.6268	.6407	.4026
.90	.9391	.9492	.7980	.7089	.7238	.4649
1.00	.9528	.9607	.8885	.7946	.8102	.5315
1.50	.9898	.9915	1.3657	1.2600	1.2776	.9091
2.00	.9986	.9988	1.8614	1.7533	1.7713	1.3209
2.24	.9995	.9996	2.1010	1.9927	2.0108	1.5217

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.1037	.7350	.1804	.1805	.1805	.1095

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.3194	.1806	.0545

TABLE II-D-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .60 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	.5000	-4.2254	-2.5352	-2.1127	.0000
-1.00	.6315	.5393	-.8464	-.4994	-.4126	.0103
-.90	.6406	.5508	-.7623	-.4459	-.3668	.0140
-.80	.6516	.5645	-.6781	-.3915	-.3199	.0189
-.70	.6644	.5805	-.5940	-.3361	-.2717	.0250
-.60	.6792	.5990	-.5097	-.2796	-.2220	.0327
-.50	.6959	.6199	-.4253	-.2215	-.1706	.0422
-.40	.7143	.6429	-.3406	-.1618	-.1171	.0538
-.36	.7221	.6527	-.3066	-.1374	-.0951	.0591
-.32	.7302	.6627	-.2726	-.1127	-.0727	.0648
-.28	.7384	.6730	-.2385	-.0877	-.0500	.0709
-.24	.7469	.6836	-.2043	-.0623	-.0268	.0774
-.20	.7555	.6943	-.1700	-.0365	-.0031	.0844
-.16	.7642	.7052	-.1356	-.0104	.0210	.0919
-.12	.7730	.7163	-.1011	.0162	.0455	.0999
-.08	.7820	.7275	-.0664	.0431	.0705	.1083
-.04	.7910	.7387	-.0317	.0704	.0960	.1173
.00	.8000	.7500	.0032	.0982	.1220	.1269
.04	.8090	.7613	.0383	.1264	.1484	.1369
.08	.8180	.7725	.0735	.1550	.1754	.1475
.12	.8270	.7837	.1088	.1841	.2029	.1587
.16	.8358	.7948	.1444	.2137	.2310	.1705
.20	.8445	.8057	.1801	.2436	.2595	.1828
.24	.8531	.8164	.2159	.2741	.2886	.1958
.28	.8616	.8270	.2519	.3050	.3182	.2093
.32	.8698	.8373	.2882	.3363	.3484	.2234
.36	.8779	.8473	.3246	.3681	.3790	.2381
.40	.8857	.8571	.3611	.4004	.4102	.2534
.50	.9041	.8801	.4534	.4829	.4903	.2941
.60	.9208	.9010	.5467	.5681	.5735	.3382
.70	.9356	.9195	.6411	.6558	.6594	.3856
.80	.9484	.9355	.7365	.7457	.7479	.4359
.90	.9594	.9492	.8328	.8375	.8387	.4889
1.00	.9685	.9607	.9298	.9310	.9313	.5441
1.50	.9932	.9915	1.4228	1.4158	1.4140	.8434
2.00	.9991	.9988	1.9214	1.9129	1.9108	1.1595
2.16	.9995	.9994	2.0813	2.0727	2.0706	1.2616

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.0209	.8047	.0215	.1129	.1357	.1320

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.1002	.2499	-.0448

TABLE II-E-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .80 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	.5000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	.5393	.0097	.0004	.0050	.0000
-.90	.1015	.5508	.0130	.0007	.0069	.0000
-.80	.1289	.5645	.0172	.0012	.0092	.0001
-.70	.1611	.5805	.0224	.0019	.0122	.0002
-.60	.1981	.5990	.0288	.0031	.0159	.0004
-.50	.2397	.6199	.0364	.0048	.0206	.0008
-.40	.2858	.6429	.0455	.0072	.0264	.0014
-.36	.3053	.6527	.0496	.0084	.0290	.0018
-.32	.3254	.6627	.0540	.0098	.0319	.0022
-.28	.3461	.6730	.0586	.0113	.0350	.0027
-.24	.3671	.6836	.0636	.0131	.0383	.0034
-.20	.3886	.6943	.0689	.0151	.0420	.0041
-.16	.4105	.7052	.0744	.0173	.0459	.0050
-.12	.4326	.7163	.0804	.0198	.0501	.0061
-.08	.4550	.7275	.0867	.0226	.0546	.0073
-.04	.4774	.7387	.0933	.0257	.0595	.0088
.00	.5000	.7500	.1004	.0292	.0648	.0105
.04	.5226	.7613	.1079	.0330	.0704	.0124
.08	.5450	.7725	.1158	.0372	.0765	.0147
.12	.5674	.7837	.1242	.0419	.0830	.0173
.16	.5895	.7948	.1331	.0470	.0901	.0202
.20	.6114	.8057	.1425	.0527	.0976	.0236
.24	.6329	.8164	.1524	.0588	.1056	.0275
.28	.6539	.8270	.1629	.0656	.1142	.0318
.32	.6746	.8373	.1740	.0730	.1235	.0367
.36	.6947	.8473	.1857	.0810	.1334	.0422
.40	.7142	.8571	.1981	.0897	.1439	.0484
.50	.7603	.8801	.2322	.1149	.1735	.0669
.60	.8019	.9010	.2711	.1453	.2082	.0907
.70	.8389	.9195	.3153	.1816	.2485	.1206
.80	.8711	.9355	.3653	.2244	.2949	.1572
.90	.8985	.9492	.4215	.2741	.3478	.2012
1.00	.9214	.9607	.4838	.3309	.4073	.2529
1.50	.9831	.9915	.8790	.7103	.7946	.6172
2.00	.9977	.9988	1.3555	1.1832	1.2694	1.0866
2.34	.9995	.9998	1.6929	1.5202	1.6066	1.4232

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.3155	.6723	.1727	.0721	.1224	.0362

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.8198	.0721	.4318

TABLE II-E-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA = .50 C_A^2 = .80 PHI B = .20

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.2000	.5000	-.4274	-.0855	-.2137	.0000
-1.00	.2629	.5393	-.0780	-.0136	-.0378	.0009
-.90	.2812	.5508	-.0669	-.0106	-.0317	.0012
-.80	.3032	.5645	-.0549	-.0071	-.0250	.0018
-.70	.3289	.5805	-.0421	-.0031	-.0177	.0025
-.60	.3585	.5990	-.0282	.0017	-.0095	.0036
-.50	.3918	.6199	-.0131	.0074	-.0003	.0051
-.40	.4286	.6429	.0034	.0141	.0101	.0073
-.36	.4443	.6527	.0104	.0172	.0147	.0083
-.32	.4603	.6627	.0177	.0205	.0195	.0095
-.28	.4768	.6730	.0254	.0241	.0246	.0109
-.24	.4937	.6836	.0333	.0279	.0299	.0125
-.20	.5109	.6943	.0415	.0321	.0356	.0142
-.16	.5284	.7052	.0501	.0366	.0416	.0162
-.12	.5461	.7163	.0591	.0414	.0480	.0184
-.08	.5640	.7275	.0684	.0465	.0547	.0209
-.04	.5820	.7387	.0782	.0521	.0619	.0237
.00	.6000	.7500	.0883	.0581	.0695	.0269
.04	.6180	.7613	.0990	.0646	.0775	.0304
.08	.6360	.7725	.1100	.0716	.0860	.0343
.12	.6539	.7837	.1216	.0790	.0950	.0387
.16	.6716	.7948	.1337	.0871	.1046	.0435
.20	.6891	.8057	.1464	.0957	.1147	.0489
.24	.7063	.8164	.1596	.1049	.1254	.0548
.28	.7232	.8270	.1735	.1148	.1368	.0613
.32	.7397	.8373	.1880	.1254	.1489	.0685
.36	.7557	.8473	.2031	.1367	.1616	.0763
.40	.7714	.8571	.2190	.1488	.1751	.0849
.50	.8082	.8801	.2618	.1827	.2123	.1100
.60	.8415	.9010	.3095	.2221	.2549	.1406
.70	.8711	.9195	.3625	.2675	.3032	.1774
.80	.8968	.9355	.4211	.3193	.3575	.2209
.90	.9188	.9492	.4854	.3777	.4181	.2714
1.00	.9371	.9607	.5552	.4426	.4848	.3288
1.50	.9864	.9915	.9746	.8484	.8957	.7048
2.00	.9981	.9988	1.4574	1.3282	1.3766	1.1624
2.30	.9995	.9997	1.7556	1.6261	1.6747	1.4481

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.2463	.7090	.1618	.1065	.1272	.0558

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.7062	.0926	.2374

TABLE II-E-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .80 PHI B = .40

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.4000	.5000	-1.0753	-.4301	-.5376	.0000
-1.00	.4472	.5393	-.2085	-.0800	-.1014	.0028
-.90	.4609	.5508	-.1846	-.0692	-.0884	.0039
-.80	.4774	.5645	-.1601	-.0576	-.0747	.0054
-.70	.4967	.5805	-.1346	-.0453	-.0601	.0073
-.60	.5188	.5990	-.1082	-.0318	-.0445	.0099
-.50	.5438	.6199	-.0805	-.0171	-.0277	.0133
-.40	.5715	.6429	-.0513	-.0009	-.0093	.0177
-.36	.5832	.6527	-.0392	.0061	-.0014	.0198
-.32	.5953	.6627	-.0268	.0135	.0067	.0221
-.28	.6076	.6730	-.0141	.0211	.0152	.0247
-.24	.6203	.6836	-.0010	.0291	.0241	.0275
-.20	.6332	.6943	.0123	.0375	.0333	.0307
-.16	.6463	.7052	.0261	.0463	.0429	.0341
-.12	.6596	.7163	.0402	.0555	.0530	.0378
-.08	.6730	.7275	.0547	.0652	.0635	.0420
-.04	.6865	.7387	.0697	.0754	.0744	.0465
.00	.7000	.7500	.0851	.0861	.0859	.0514
.04	.7135	.7613	.1010	.0973	.0979	.0568
.08	.7270	.7725	.1174	.1091	.1105	.0627
.12	.7404	.7837	.1343	.1215	.1236	.0691
.16	.7537	.7948	.1517	.1345	.1374	.0760
.20	.7668	.8057	.1697	.1482	.1518	.0836
.24	.7797	.8164	.1883	.1626	.1669	.0917
.28	.7924	.8270	.2075	.1777	.1827	.1005
.32	.8047	.8373	.2274	.1935	.1992	.1100
.36	.8168	.8473	.2479	.2101	.2164	.1202
.40	.8285	.8571	.2691	.2276	.2345	.1311
.50	.8562	.8801	.3251	.2748	.2832	.1620
.60	.8812	.9010	.3857	.3275	.3372	.1981
.70	.9033	.9195	.4511	.3858	.3967	.2397
.80	.9226	.9355	.5212	.4499	.4618	.2870
.90	.9391	.9492	.5960	.5195	.5323	.3399
1.00	.9528	.9607	.6752	.5945	.6079	.3981
1.50	.9898	.9915	1.1220	1.0304	1.0456	.7519
2.00	.9986	.9988	1.6113	1.5173	1.5330	1.1584
2.24	.9995	.9996	1.8503	1.7562	1.7718	1.3587

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.1715	.7575	.1569	.1384	.1415	.0782

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.5466	.1261	.0731

TABLE II-E-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .80 PHI B = .60

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.6000	.5000	-2.8302	-1.6981	-1.4151	.0000
-1.00	.6315	.5393	-.5640	-.3327	-.2749	.0070
-.90	.6406	.5508	-.5066	-.2962	-.2435	.0095
-.80	.6516	.5645	-.4488	-.2588	-.2113	.0128
-.70	.6644	.5805	-.3906	-.2206	-.1780	.0171
-.60	.6792	.5990	-.3319	-.1811	-.1434	.0224
-.50	.6959	.6199	-.2724	-.1402	-.1072	.0291
-.40	.7143	.6429	-.2120	-.0977	-.0691	.0374
-.36	.7221	.6527	-.1876	-.0801	-.0532	.0412
-.32	.7302	.6627	-.1630	-.0622	-.0370	.0453
-.28	.7384	.6730	-.1381	-.0440	-.0205	.0498
-.24	.7469	.6836	-.1131	-.0254	-.0035	.0546
-.20	.7555	.6943	-.0878	-.0064	.0140	.0597
-.16	.7642	.7052	-.0622	.0130	.0319	.0653
-.12	.7730	.7163	-.0364	.0329	.0502	.0712
-.08	.7820	.7275	-.0103	.0532	.0690	.0776
-.04	.7910	.7387	.0161	.0739	.0884	.0845
.00	.8000	.7500	.0428	.0952	.1083	.0917
.04	.8090	.7613	.0699	.1170	.1288	.0995
.08	.8180	.7725	.0973	.1393	.1498	.1078
.12	.8270	.7837	.1251	.1621	.1714	.1166
.16	.8358	.7948	.1532	.1855	.1936	.1259
.20	.8445	.8057	.1818	.2095	.2164	.1358
.24	.8531	.8164	.2107	.2341	.2399	.1462
.28	.8616	.8270	.2401	.2593	.2640	.1572
.32	.8698	.8373	.2699	.2850	.2888	.1688
.36	.8779	.8473	.3001	.3114	.3143	.1810
.40	.8857	.8571	.3307	.3385	.3404	.1938
.50	.9041	.8801	.4093	.4088	.4086	.2285
.60	.9208	.9010	.4906	.4830	.4811	.2669
.70	.9356	.9195	.5746	.5610	.5576	.3091
.80	.9484	.9355	.6612	.6426	.6379	.3548
.90	.9594	.9492	.7502	.7275	.7218	.4038
1.00	.9685	.9607	.8414	.8154	.8089	.4557
1.50	.9932	.9915	1.3198	1.2859	1.2775	.7463
2.00	.9991	.9988	1.8157	1.7803	1.7714	1.0606
2.16	.9995	.9994	1.9754	1.9399	1.9310	1.1626

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.0676	.8152	.0888	.1323	.1432	.1052

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.2734	.1976	-.0699

TABLE II-F-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .90 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	.5000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	.5393	.0048	.0002	.0025	.0000
-.90	.1015	.5508	.0065	.0004	.0034	.0000
-.80	.1289	.5645	.0086	.0006	.0046	.0001
-.70	.1611	.5805	.0112	.0010	.0061	.0001
-.60	.1981	.5990	.0144	.0016	.0080	.0002
-.50	.2397	.6199	.0183	.0024	.0103	.0004
-.40	.2858	.6429	.0229	.0036	.0133	.0007
-.36	.3053	.6527	.0250	.0042	.0146	.0009
-.32	.3254	.6627	.0272	.0049	.0161	.0011
-.28	.3461	.6730	.0296	.0057	.0176	.0014
-.24	.3671	.6836	.0321	.0066	.0194	.0017
-.20	.3886	.6943	.0348	.0076	.0212	.0021
-.16	.4105	.7052	.0377	.0088	.0232	.0026
-.12	.4326	.7163	.0407	.0101	.0254	.0031
-.08	.4550	.7275	.0440	.0115	.0278	.0037
-.04	.4774	.7387	.0475	.0131	.0303	.0045
.00	.5000	.7500	.0512	.0150	.0331	.0054
.04	.5226	.7613	.0551	.0170	.0360	.0064
.08	.5450	.7725	.0593	.0192	.0392	.0076
.12	.5674	.7837	.0637	.0217	.0427	.0090
.16	.5895	.7948	.0685	.0244	.0464	.0106
.20	.6114	.8057	.0735	.0275	.0505	.0124
.24	.6329	.8164	.0789	.0308	.0548	.0145
.28	.6539	.8270	.0846	.0345	.0596	.0169
.32	.6746	.8373	.0907	.0386	.0646	.0195
.36	.6947	.8473	.0973	.0430	.0701	.0226
.40	.7142	.8571	.1042	.0479	.0761	.0261
.50	.7603	.8801	.1237	.0623	.0930	.0367
.60	.8019	.9010	.1466	.0803	.1135	.0507
.70	.8389	.9195	.1737	.1025	.1381	.0690
.80	.8711	.9355	.2055	.1297	.1676	.0923
.90	.8985	.9492	.2429	.1628	.2029	.1216
1.00	.9214	.9607	.2864	.2025	.2445	.1577
1.50	.9831	.9915	.6082	.5117	.5599	.4550
2.00	.9977	.9988	1.0609	.9610	1.0109	.9010
2.34	.9995	.9998	1.3954	1.2951	1.3452	1.2347

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.3776	.7033	.1003	.0451	.0727	.0241

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.0449	.0451	.5013

TABLE II-F-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA = .50 C_A^2 = .90 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	.5000	-.2155	-.0431	-.1078	.0000
-1.00	.2629	.5393	-.0393	-.0069	-.0190	.0004
-.90	.2812	.5508	-.0336	-.0053	-.0159	.0006
-.80	.3032	.5645	-.0275	-.0035	-.0125	.0009
-.70	.3289	.5805	-.0210	-.0015	-.0088	.0013
-.60	.3585	.5990	-.0139	.0010	-.0046	.0018
-.50	.3918	.6199	-.0061	.0039	.0001	.0026
-.40	.4286	.6429	.0024	.0074	.0055	.0037
-.36	.4443	.6527	.0061	.0090	.0079	.0043
-.32	.4603	.6627	.0099	.0107	.0104	.0049
-.28	.4768	.6730	.0139	.0126	.0131	.0056
-.24	.4937	.6836	.0181	.0146	.0159	.0064
-.20	.5109	.6943	.0224	.0168	.0189	.0074
-.16	.5284	.7052	.0270	.0192	.0221	.0084
-.12	.5461	.7163	.0317	.0217	.0255	.0096
-.08	.5640	.7275	.0367	.0245	.0291	.0109
-.04	.5820	.7387	.0420	.0275	.0329	.0124
.00	.6000	.7500	.0475	.0307	.0370	.0141
.04	.6180	.7613	.0532	.0343	.0414	.0161
.08	.6360	.7725	.0593	.0381	.0460	.0182
.12	.6539	.7837	.0657	.0422	.0510	.0206
.16	.6716	.7948	.0724	.0467	.0563	.0233
.20	.6891	.8057	.0795	.0515	.0620	.0263
.24	.7063	.8164	.0870	.0567	.0681	.0296
.28	.7232	.8270	.0949	.0624	.0746	.0334
.32	.7397	.8373	.1033	.0685	.0815	.0375
.36	.7557	.8473	.1121	.0751	.0889	.0421
.40	.7714	.8571	.1214	.0822	.0969	.0472
.50	.8082	.8801	.1472	.1026	.1193	.0622
.60	.8415	.9010	.1769	.1271	.1458	.0813
.70	.8711	.9195	.2113	.1565	.1771	.1052
.80	.8968	.9355	.2508	.1915	.2138	.1345
.90	.9188	.9492	.2962	.2328	.2566	.1702
1.00	.9371	.9607	.3479	.2808	.3060	.2127
1.50	.9864	.9915	.7033	.6250	.6544	.5319
2.00	.9981	.9988	1.1678	1.0866	1.1171	.9722
2.30	.9995	.9997	1.4640	1.3825	1.4131	1.2559

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3131	.7368	.1018	.0674	.0803	.0368

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.9379	.0588	.2849

TABLE II-F-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .90 PHI B = .40

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.4000	.5000	-.5618	-.2247	-.2809	.0000
-1.00	.4472	.5393	-.1086	-.0416	-.0528	.0015
-.90	.4609	.5508	-.0960	-.0359	-.0459	.0021
-.80	.4774	.5645	-.0829	-.0298	-.0386	.0028
-.70	.4967	.5805	-.0694	-.0232	-.0309	.0039
-.60	.5188	.5990	-.0552	-.0160	-.0225	.0053
-.50	.5438	.6199	-.0402	-.0080	-.0134	.0071
-.40	.5715	.6429	-.0244	.0008	-.0034	.0095
-.36	.5832	.6527	-.0177	.0046	.0009	.0106
-.32	.5953	.6627	-.0109	.0087	.0054	.0119
-.28	.6076	.6730	-.0039	.0129	.0101	.0133
-.24	.6203	.6836	.0034	.0173	.0150	.0149
-.20	.6332	.6943	.0109	.0220	.0202	.0167
-.16	.6463	.7052	.0186	.0270	.0256	.0186
-.12	.6596	.7163	.0266	.0322	.0312	.0207
-.08	.6730	.7275	.0348	.0377	.0372	.0231
-.04	.6865	.7387	.0434	.0435	.0435	.0256
.00	.7000	.7500	.0523	.0497	.0501	.0285
.04	.7135	.7613	.0615	.0562	.0571	.0316
.08	.7270	.7725	.0711	.0631	.0645	.0351
.12	.7404	.7837	.0811	.0705	.0722	.0389
.16	.7537	.7948	.0916	.0782	.0805	.0430
.20	.7668	.8057	.1024	.0865	.0892	.0476
.24	.7797	.8164	.1138	.0953	.0983	.0525
.28	.7924	.8270	.1256	.1046	.1081	.0579
.32	.8047	.8373	.1380	.1145	.1184	.0639
.36	.8168	.8473	.1509	.1249	.1293	.0703
.40	.8285	.8571	.1645	.1361	.1408	.0773
.50	.8562	.8801	.2011	.1670	.1727	.0975
.60	.8812	.9010	.2423	.2028	.2094	.1220
.70	.9033	.9195	.2885	.2440	.2514	.1514
.80	.9226	.9355	.3401	.2912	.2993	.1862
.90	.9391	.9492	.3975	.3446	.3534	.2268
1.00	.9528	.9607	.4609	.4046	.4140	.2734
1.50	.9898	.9915	.8584	.7926	.8035	.5885
2.00	.9986	.9988	1.3354	1.2674	1.2787	.9849
2.24	.9995	.9996	1.5732	1.5050	1.5164	1.1842

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.2398	.7796	.1137	.0952	.0983	.0525

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.7805	.0829	.0926

TABLE II-F-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = .50 C_A^2 = .90 PHI B = .60

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.6000	.5000	-1.7045	-1.0227	-.8523	.0000
-1.00	.6315	.5393	-.3382	-.1995	-.1648	.0042
-.90	.6406	.5508	-.3031	-.1771	-.1456	.0058
-.80	.6516	.5645	-.2676	-.1542	-.1258	.0078
-.70	.6644	.5805	-.2316	-.1305	-.1052	.0104
-.60	.6792	.5990	-.1950	-.1059	-.0837	.0138
-.50	.6959	.6199	-.1576	-.0802	-.0609	.0180
-.40	.7143	.6429	-.1193	-.0532	-.0367	.0232
-.36	.7221	.6527	-.1037	-.0420	-.0266	.0257
-.32	.7302	.6627	-.0878	-.0305	-.0161	.0283
-.28	.7384	.6730	-.0717	-.0186	-.0054	.0312
-.24	.7469	.6836	-.0554	-.0065	.0057	.0343
-.20	.7555	.6943	-.0388	.0059	.0171	.0377
-.16	.7642	.7052	-.0219	.0188	.0289	.0414
-.12	.7730	.7163	-.0048	.0320	.0411	.0454
-.08	.7820	.7275	.0127	.0456	.0538	.0496
-.04	.7910	.7387	.0306	.0596	.0668	.0543
.00	.8000	.7500	.0488	.0741	.0804	.0592
.04	.8090	.7613	.0674	.0890	.0944	.0646
.08	.8180	.7725	.0864	.1045	.1090	.0703
.12	.8270	.7837	.1058	.1205	.1241	.0764
.16	.8358	.7948	.1257	.1370	.1398	.0830
.20	.8445	.8057	.1461	.1541	.1561	.0901
.24	.8531	.8164	.1670	.1719	.1731	.0976
.28	.8616	.8270	.1884	.1902	.1907	.1057
.32	.8698	.8373	.2104	.2092	.2090	.1142
.36	.8779	.8473	.2329	.2289	.2280	.1233
.40	.8857	.8571	.2560	.2494	.2477	.1330
.50	.9041	.8801	.3166	.3036	.3003	.1597
.60	.9208	.9010	.3813	.3626	.3579	.1903
.70	.9356	.9195	.4502	.4266	.4206	.2249
.80	.9484	.9355	.5233	.4955	.4885	.2635
.90	.9594	.9492	.6007	.5693	.5614	.3061
1.00	.9685	.9607	.6820	.6477	.6391	.3524
1.50	.9932	.9915	1.1343	1.0925	1.0821	.6272
2.00	.9991	.9988	1.6246	1.5814	1.5706	.9380
2.16	.9995	.9994	1.7839	1.7406	1.7297	1.0397

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.1250	.8281	.1083	.1225	.1261	.0773

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.4844	.1439	-.1001

TABLE III-A-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .CO PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	1.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	1.0000	.0251	.0011	.0251	.0001
-.90	.1015	1.0000	.0341	.0019	.0341	.0001
-.80	.1289	1.0000	.0456	.0032	.0456	.0003
-.70	.1611	1.0000	.0601	.0053	.0601	.0006
-.60	.1981	1.0000	.0780	.0085	.0780	.0012
-.50	.2397	1.0000	.0998	.0133	.0998	.0022
-.40	.2858	1.0000	.1261	.0202	.1261	.0041
-.36	.3053	1.0000	.1379	.0237	.1379	.0051
-.32	.3254	1.0000	.1505	.0277	.1505	.0063
-.28	.3461	1.0000	.1639	.0322	.1639	.0079
-.24	.3671	1.0000	.1782	.0373	.1782	.0097
-.20	.3886	1.0000	.1933	.0430	.1933	.0118
-.16	.4105	1.0000	.2093	.0494	.2093	.0144
-.12	.4326	1.0000	.2262	.0565	.2262	.0174
-.08	.4550	1.0000	.2439	.0644	.2439	.0209
-.04	.4774	1.0000	.2626	.0731	.2626	.0249
.00	.5000	1.0000	.2821	.0826	.2821	.0296
.04	.5226	1.0000	.3026	.0931	.3026	.0350
.08	.5450	1.0000	.3239	.1045	.3239	.0411
.12	.5674	1.0000	.3462	.1169	.3462	.0479
.16	.5895	1.0000	.3693	.1303	.3693	.0557
.20	.6114	1.0000	.3933	.1447	.3933	.0644
.24	.6329	1.0000	.4182	.1602	.4182	.0740
.28	.6539	1.0000	.4439	.1767	.4439	.0846
.32	.6746	1.0000	.4705	.1944	.4705	.0964
.36	.6947	1.0000	.4979	.2131	.4979	.1092
.40	.7142	1.0000	.5261	.2330	.5261	.1232
.50	.7603	1.0000	.5998	.2874	.5998	.1634
.60	.8019	1.0000	.6780	.3485	.6780	.2111
.70	.8389	1.0000	.7601	.4159	.7601	.2665
.80	.8711	1.0000	.8456	.4891	.8456	.3291
.90	.8985	1.0000	.9341	.5674	.9341	.3984
1.00	.9214	1.0000	1.0251	.6503	1.0251	.4739
1.50	.9831	1.0000	1.5043	1.1097	1.5043	.9144
2.00	.9977	1.0000	2.0005	1.6021	2.0005	1.4031
2.34	.9995	1.0000	2.3401	1.9412	2.3401	1.7419

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.2090	.6162	.3988	.1481	.3988	.0665

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.3988	.1481	.3988

TABLE III-A-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .C0 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.C0	.2000	1.0000	-1.0000	-.2000	-1.0000	.0000
-1.C0	.2629	1.0000	-.1799	-.0313	-.1799	.0020
-.90	.2812	1.0000	-.1527	-.0239	-.1527	.0030
-.80	.3032	1.0000	-.1235	-.0154	-.1235	.0043
-.70	.3289	1.0000	-.0920	-.0054	-.0920	.0062
-.60	.3585	1.0000	-.0576	.0064	-.0576	.0089
-.50	.3918	1.0000	-.0201	.0205	-.0201	.0126
-.40	.4286	1.0000	.0209	.0373	.0209	.0179
-.36	.4443	1.0000	.0383	.0449	.0383	.0205
-.32	.4603	1.0000	.0564	.0531	.0564	.0235
-.28	.4768	1.0000	.0751	.0619	.0751	.0269
-.24	.4937	1.0000	.0946	.0713	.0946	.0307
-.20	.5109	1.0000	.1147	.0814	.1147	.0349
-.16	.5284	1.0000	.1354	.0922	.1354	.0397
-.12	.5461	1.0000	.1569	.1037	.1569	.0451
-.C8	.5640	1.0000	.1791	.1161	.1791	.0510
-.C4	.5820	1.0000	.2020	.1292	.2020	.0576
.C0	.6000	1.0000	.2257	.1432	.2257	.0650
.04	.6180	1.0000	.2500	.1580	.2500	.0730
.08	.6360	1.0000	.2751	.1737	.2751	.0819
.12	.6539	1.0000	.3009	.1904	.3009	.0916
.16	.6716	1.0000	.3274	.2079	.3274	.1022
.20	.6891	1.0000	.3547	.2265	.3547	.1137
.24	.7063	1.0000	.3826	.2459	.3826	.1262
.28	.7232	1.0000	.4111	.2664	.4111	.1396
.32	.7397	1.0000	.4404	.2878	.4404	.1541
.36	.7557	1.0000	.4703	.3101	.4703	.1696
.40	.7714	1.0000	.5009	.3335	.5009	.1862
.50	.8082	1.0000	.5799	.3959	.5799	.2324
.60	.8415	1.0000	.6624	.4640	.6624	.2853
.70	.8711	1.0000	.7480	.5374	.7480	.3448
.80	.8968	1.0000	.8365	.6156	.8365	.4104
.90	.9188	1.0000	.9273	.6981	.9273	.4817
1.C0	.9371	1.0000	1.0201	.7842	1.0201	.5579
1.50	.9864	1.0000	1.5035	1.2516	1.5035	.9906
2.C0	.9981	1.0000	2.0004	1.7455	2.0004	1.4616
2.30	.9995	1.0000	2.3001	2.0449	2.3001	1.7487

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.1474	.6661	.3190	.2023	.3190	.0988

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.319C	.1732	.2552

TABLE III-A-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .CO PHI B = .40

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.CO	.4000	1.0000	-2.0000	-.8000	-2.0000	.0000
-1.CO	.4472	1.0000	-.3849	-.1476	-.3849	.0053
-.90	.4609	1.0000	-.3395	-.1270	-.3395	.0074
-.80	.4774	1.0000	-.2926	-.1050	-.2926	.0102
-.70	.4967	1.0000	-.2440	-.0813	-.2440	.0139
-.60	.5188	1.0000	-.1932	-.0555	-.1932	.0189
-.50	.5438	1.0000	-.1401	-.0273	-.1401	.0254
-.40	.5715	1.0000	-.0844	.0038	-.0844	.0338
-.36	.5832	1.0000	-.0613	.0171	-.0613	.0378
-.32	.5953	1.0000	-.0377	.0310	-.0377	.0422
-.28	.6076	1.0000	-.0136	.0455	-.0136	.0471
-.24	.6203	1.0000	.0109	.0606	.0109	.0524
-.20	.6332	1.0000	.0360	.0763	.0360	.0583
-.16	.6463	1.0000	.0616	.0926	.0616	.0646
-.12	.6596	1.0000	.0877	.1097	.0877	.0716
-.08	.6730	1.0000	.1143	.1275	.1143	.0792
-.04	.6865	1.0000	.1415	.1459	.1415	.0874
.00	.7000	1.0000	.1693	.1652	.1693	.0963
.04	.7135	1.0000	.1975	.1851	.1975	.1059
.08	.7270	1.0000	.2263	.2059	.2263	.1162
.12	.7404	1.0000	.2557	.2274	.2557	.1273
.16	.7537	1.0000	.2856	.2498	.2856	.1392
.20	.7668	1.0000	.3160	.2729	.3160	.1519
.24	.7797	1.0000	.3469	.2968	.3469	.1655
.28	.7924	1.0000	.3784	.3215	.3784	.1799
.32	.8047	1.0000	.4103	.3470	.4103	.1951
.36	.8168	1.0000	.4427	.3733	.4427	.2113
.40	.8285	1.0000	.4756	.4004	.4756	.2283
.50	.8562	1.0000	.5599	.4714	.5599	.2746
.60	.8812	1.0000	.6468	.5469	.6468	.3263
.70	.9033	1.0000	.7360	.6265	.7360	.3831
.80	.9226	1.0000	.8274	.7099	.8274	.4447
.90	.9391	1.0000	.9205	.7966	.9205	.5105
1.CO	.9528	1.0000	1.0151	.8862	1.0151	.5801
1.50	.9898	1.0000	1.5026	1.3615	1.5026	.9657
2.00	.9986	1.0000	2.0003	1.8570	2.0003	1.3792
2.24	.9995	1.0000	2.2401	2.0966	2.2401	1.5803

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.0976	.7329	.2392	.2153	.2392	.1210

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.2391	.1993	.1436

TABLE III-A-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .00 PHI B = .60

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.6000	1.0000	-3.0000	-1.8000	-3.0000	.0000
-1.00	.6315	1.0000	-.5899	-.3478	-.5899	.0075
-.90	.6406	1.0000	-.5264	-.3073	-.5264	.0104
-.80	.6516	1.0000	-.4618	-.2656	-.4618	.0141
-.70	.6644	1.0000	-.3960	-.2223	-.3960	.0189
-.60	.6792	1.0000	-.3288	-.1772	-.3288	.0250
-.50	.6959	1.0000	-.2601	-.1300	-.2601	.0327
-.40	.7143	1.0000	-.1896	-.0803	-.1896	.0424
-.36	.7221	1.0000	-.1608	-.0596	-.1608	.0469
-.32	.7302	1.0000	-.1318	-.0385	-.1318	.0517
-.28	.7384	1.0000	-.1024	-.0170	-.1024	.0570
-.24	.7469	1.0000	-.0727	.0051	-.0727	.0627
-.20	.7555	1.0000	-.0427	.0277	-.0427	.0688
-.16	.7642	1.0000	-.0123	.0508	-.0123	.0754
-.12	.7730	1.0000	.0185	.0744	.0185	.0825
-.08	.7820	1.0000	.0496	.0986	.0496	.0901
-.04	.7910	1.0000	.0810	.1233	.0810	.0983
.00	.8000	1.0000	.1128	.1486	.1128	.1069
.04	.8090	1.0000	.1450	.1745	.1450	.1162
.08	.8180	1.0000	.1776	.2010	.1776	.1260
.12	.8270	1.0000	.2105	.2281	.2105	.1364
.16	.8358	1.0000	.2437	.2557	.2437	.1474
.20	.8445	1.0000	.2773	.2839	.2773	.1591
.24	.8531	1.0000	.3113	.3128	.3113	.1713
.28	.8616	1.0000	.3456	.3422	.3456	.1842
.32	.8698	1.0000	.3802	.3721	.3802	.1977
.36	.8779	1.0000	.4152	.4027	.4152	.2118
.40	.8857	1.0000	.4504	.4338	.4504	.2265
.50	.9041	1.0000	.5399	.5139	.5399	.2660
.60	.9208	1.0000	.6312	.5972	.6312	.3091
.70	.9356	1.0000	.7240	.6834	.7240	.3557
.80	.9484	1.0000	.8182	.7721	.8182	.4054
.90	.9594	1.0000	.9136	.8632	.9136	.4579
1.00	.9685	1.0000	1.0101	.9561	1.0101	.5128
1.50	.9932	1.0000	1.5017	1.4396	1.5017	.8113
2.00	.9991	1.0000	2.0002	1.9366	2.0002	1.1273
2.16	.9995	1.0000	2.1601	2.0963	2.1601	1.2294

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.0577	.8130	.1594	.1862	.1594	.1205

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.1593	.2263	.0638

TABLE III-B-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .20 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	1.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	1.0000	.0201	.0009	.0201	.0000
-.90	.1015	1.0000	.0273	.0015	.0273	.0001
-.80	.1289	1.0000	.0365	.0026	.0365	.0002
-.70	.1611	1.0000	.0481	.0043	.0481	.0005
-.60	.1981	1.0000	.0626	.0068	.0626	.0009
-.50	.2397	1.0000	.0802	.0107	.0802	.0018
-.40	.2858	1.0000	.1015	.0163	.1015	.0033
-.36	.3053	1.0000	.1111	.0192	.1111	.0041
-.32	.3254	1.0000	.1214	.0224	.1214	.0051
-.28	.3461	1.0000	.1324	.0261	.1324	.0064
-.24	.3671	1.0000	.1441	.0303	.1441	.0079
-.20	.3886	1.0000	.1566	.0350	.1566	.0097
-.16	.4105	1.0000	.1698	.0403	.1698	.0118
-.12	.4326	1.0000	.1838	.0462	.1838	.0143
-.08	.4550	1.0000	.1986	.0527	.1986	.0172
-.04	.4774	1.0000	.2142	.0600	.2142	.0206
.00	.5000	1.0000	.2306	.0680	.2306	.0245
.04	.5226	1.0000	.2478	.0769	.2478	.0290
.08	.5450	1.0000	.2660	.0865	.2660	.0342
.12	.5674	1.0000	.2849	.0971	.2849	.0400
.16	.5895	1.0000	.3048	.1086	.3048	.0467
.20	.6114	1.0000	.3255	.1210	.3255	.0542
.24	.6329	1.0000	.3471	.1344	.3471	.0625
.28	.6539	1.0000	.3695	.1489	.3695	.0718
.32	.6746	1.0000	.3928	.1644	.3928	.0821
.36	.6947	1.0000	.4170	.1809	.4170	.0934
.40	.7142	1.0000	.4420	.1986	.4420	.1059
.50	.7603	1.0000	.5083	.2474	.5083	.1419
.60	.8019	1.0000	.5795	.3031	.5795	.1855
.70	.8389	1.0000	.6554	.3654	.6554	.2366
.80	.8711	1.0000	.7355	.4340	.7355	.2953
.90	.8985	1.0000	.8195	.5083	.8195	.3611
1.00	.9214	1.0000	.9068	.5878	.9068	.4335
1.50	.9831	1.0000	1.3765	1.0382	1.3765	.8655
2.00	.9977	1.0000	1.8709	1.5287	1.8709	1.3523
2.34	.9995	1.0000	2.2102	1.8677	2.2102	1.6909

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.2316	.6284	.3425	.1316	.3425	.0607

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.4723	.1316	.4281

TABLE III-B-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .20 PHI B = .20

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.2000	1.0000	-.8065	-.1613	-.8065	.0000
-1.00	.2629	1.0000	-.1447	-.0251	-.1447	.0017
-.90	.2812	1.0000	-.1227	-.0191	-.1227	.0024
-.80	.3032	1.0000	-.0989	-.0122	-.0989	.0035
-.70	.3289	1.0000	-.0731	-.0041	-.0731	.0050
-.60	.3585	1.0000	-.0450	.0056	-.0450	.0072
-.50	.3918	1.0000	-.0142	.0172	-.0142	.0103
-.40	.4286	1.0000	.0198	.0311	.0198	.0147
-.36	.4443	1.0000	.0343	.0374	.0343	.0169
-.32	.4603	1.0000	.0494	.0443	.0494	.0194
-.28	.4768	1.0000	.0651	.0516	.0651	.0222
-.24	.4937	1.0000	.0814	.0595	.0814	.0254
-.20	.5109	1.0000	.0983	.0680	.0983	.0290
-.16	.5284	1.0000	.1159	.0772	.1159	.0330
-.12	.5461	1.0000	.1341	.0870	.1341	.0375
-.08	.5640	1.0000	.1531	.0975	.1531	.0426
-.04	.5820	1.0000	.1727	.1087	.1727	.0483
.00	.6000	1.0000	.1930	.1207	.1930	.0546
.04	.6180	1.0000	.2141	.1336	.2141	.0615
.08	.6360	1.0000	.2358	.1472	.2358	.0692
.12	.6539	1.0000	.2583	.1617	.2583	.0777
.16	.6716	1.0000	.2816	.1772	.2816	.0870
.20	.6891	1.0000	.3056	.1935	.3056	.0971
.24	.7063	1.0000	.3303	.2107	.3303	.1082
.28	.7232	1.0000	.3558	.2289	.3558	.1202
.32	.7397	1.0000	.3820	.2481	.3820	.1332
.36	.7557	1.0000	.4090	.2683	.4090	.1472
.40	.7714	1.0000	.4366	.2894	.4366	.1622
.50	.8082	1.0000	.5088	.3465	.5088	.2044
.60	.8415	1.0000	.5853	.4095	.5853	.2534
.70	.8711	1.0000	.6656	.4784	.6656	.3092
.80	.8968	1.0000	.7495	.5525	.7495	.3714
.90	.9188	1.0000	.8365	.6315	.8365	.4397
1.00	.9371	1.0000	.9262	.7148	.9262	.5134
1.50	.9864	1.0000	1.4018	1.1748	1.4018	.9393
2.00	.9981	1.0000	1.8973	1.6672	1.8973	1.4089
2.30	.9995	1.0000	2.1968	1.9664	2.1968	1.6958

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.1707	.6763	.2880	.1815	.2880	.0897

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.3912	.1548	.2789

TABLE III-B-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .20 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.4000	1.0000	-1.6529	-.6612	-1.6529	.0000
-1.00	.4472	1.0000	-.3172	-.1216	-.3172	.0044
-.90	.4609	1.0000	-.2793	-.1044	-.2793	.0061
-.80	.4774	1.0000	-.2401	-.0860	-.2401	.0085
-.70	.4967	1.0000	-.1992	-.0661	-.1992	.0116
-.60	.5188	1.0000	-.1564	-.0443	-.1564	.0158
-.50	.5438	1.0000	-.1114	-.0204	-.1114	.0213
-.40	.5715	1.0000	-.0638	.0061	-.0638	.0285
-.36	.5832	1.0000	-.0440	.0175	-.0440	.0319
-.32	.5953	1.0000	-.0238	.0295	-.0238	.0357
-.28	.6076	1.0000	-.0030	.0419	-.0030	.0399
-.24	.6203	1.0000	.0182	.0550	.0182	.0445
-.20	.6332	1.0000	.0400	.0686	.0400	.0496
-.16	.6463	1.0000	.0623	.0829	.0623	.0552
-.12	.6596	1.0000	.0851	.0978	.0851	.0612
-.08	.6730	1.0000	.1085	.1134	.1085	.0679
-.04	.6865	1.0000	.1325	.1297	.1325	.0751
.00	.7000	1.0000	.1570	.1467	.1570	.0830
.04	.7135	1.0000	.1822	.1645	.1822	.0915
.08	.7270	1.0000	.2079	.1830	.2079	.1008
.12	.7404	1.0000	.2342	.2023	.2342	.1107
.16	.7537	1.0000	.2611	.2224	.2611	.1214
.20	.7668	1.0000	.2886	.2433	.2886	.1329
.24	.7797	1.0000	.3167	.2651	.3167	.1453
.28	.7924	1.0000	.3454	.2876	.3454	.1584
.32	.8047	1.0000	.3747	.3110	.3747	.1724
.36	.8168	1.0000	.4046	.3352	.4046	.1873
.40	.8285	1.0000	.4350	.3603	.4350	.2030
.50	.8562	1.0000	.5136	.4265	.5136	.2462
.60	.8812	1.0000	.5955	.4976	.5955	.2949
.70	.9033	1.0000	.6804	.5734	.6804	.3490
.80	.9226	1.0000	.7681	.6535	.7681	.4081
.90	.9391	1.0000	.8582	.7374	.8582	.4718
1.00	.9528	1.0000	.9504	.8247	.9504	.5396
1.50	.9898	1.0000	1.4320	1.2943	1.4320	.9206
2.00	.9986	1.0000	1.9286	1.7886	1.9286	1.3332
2.24	.9995	1.0000	2.1683	2.0281	2.1683	1.5342

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.1191	.7401	.2336	.2019	.2336	.1105

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.3053	.1807	.1605

TABLE III-B-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .20 PHI B = .60

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.6000	1.0000	-2.5862	-1.5517	-2.5862	.0000
-1.00	.6315	1.0000	-.5072	-.2989	-.5072	.0065
-.90	.6406	1.0000	-.4518	-.2637	-.4518	.0090
-.80	.6516	1.0000	-.3954	-.2273	-.3954	.0122
-.70	.6644	1.0000	-.3378	-.1894	-.3378	.0164
-.60	.6792	1.0000	-.2788	-.1497	-.2788	.0218
-.50	.6959	1.0000	-.2180	-.1080	-.2180	.0286
-.40	.7143	1.0000	-.1554	-.0638	-.1554	.0372
-.36	.7221	1.0000	-.1298	-.0454	-.1298	.0412
-.32	.7302	1.0000	-.1038	-.0266	-.1038	.0456
-.28	.7384	1.0000	-.0775	-.0072	-.0775	.0503
-.24	.7469	1.0000	-.0507	.0126	-.0507	.0554
-.20	.7555	1.0000	-.0237	.0330	-.0237	.0609
-.16	.7642	1.0000	.0038	.0539	.0038	.0669
-.12	.7730	1.0000	.0317	.0753	.0317	.0734
-.08	.7820	1.0000	.0600	.0973	.0600	.0803
-.04	.7910	1.0000	.0887	.1199	.0887	.0877
.00	.8000	1.0000	.1179	.1431	.1179	.0957
.04	.8090	1.0000	.1475	.1669	.1475	.1041
.08	.8180	1.0000	.1775	.1913	.1775	.1132
.12	.8270	1.0000	.2079	.2163	.2079	.1228
.16	.8358	1.0000	.2388	.2420	.2388	.1331
.20	.8445	1.0000	.2701	.2683	.2701	.1439
.24	.8531	1.0000	.3018	.2952	.3018	.1553
.28	.8616	1.0000	.3340	.3228	.3340	.1674
.32	.8698	1.0000	.3666	.3510	.3666	.1801
.36	.8779	1.0000	.3996	.3798	.3996	.1934
.40	.8857	1.0000	.4330	.4093	.4330	.2074
.50	.9041	1.0000	.5183	.4856	.5183	.2450
.60	.9208	1.0000	.6059	.5656	.6059	.2864
.70	.9356	1.0000	.6956	.6489	.6956	.3315
.80	.9484	1.0000	.7872	.7352	.7872	.3798
.90	.9594	1.0000	.8805	.8242	.8805	.4312
1.00	.9685	1.0000	.9753	.9156	.9753	.4851
1.50	.9932	1.0000	1.4630	1.3952	1.4630	.7812
2.00	.9991	1.0000	1.9607	1.8914	1.9607	1.0967
2.16	.9995	1.0000	2.1205	2.0511	2.1205	1.1988

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.0748	.8168	.1735	.1881	.1735	.1120

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.2130	.2098	.0735

TABLE III-C-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .40 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	1.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	1.0000	.0151	.0006	.0151	.0000
-.90	.1015	1.0000	.0205	.0011	.0205	.0001
-.80	.1289	1.0000	.0274	.0019	.0274	.0002
-.70	.1611	1.0000	.0362	.0032	.0362	.0004
-.60	.1981	1.0000	.0471	.0052	.0471	.0007
-.50	.2397	1.0000	.0604	.0081	.0604	.0014
-.40	.2858	1.0000	.0766	.0124	.0766	.0025
-.36	.3053	1.0000	.0840	.0145	.0840	.0031
-.32	.3254	1.0000	.0919	.0170	.0919	.0039
-.28	.3461	1.0000	.1003	.0198	.1003	.0049
-.24	.3671	1.0000	.1093	.0231	.1093	.0060
-.20	.3886	1.0000	.1189	.0267	.1189	.0074
-.16	.4105	1.0000	.1292	.0308	.1292	.0090
-.12	.4326	1.0000	.1401	.0354	.1401	.0110
-.08	.4550	1.0000	.1516	.0405	.1516	.0132
-.04	.4774	1.0000	.1639	.0462	.1639	.0159
.00	.5000	1.0000	.1769	.0526	.1769	.0190
.04	.5226	1.0000	.1906	.0596	.1906	.0226
.08	.5450	1.0000	.2050	.0673	.2050	.0267
.12	.5674	1.0000	.2203	.0758	.2203	.0314
.16	.5895	1.0000	.2363	.0851	.2363	.0368
.20	.6114	1.0000	.2531	.0952	.2531	.0429
.24	.6329	1.0000	.2708	.1062	.2708	.0497
.28	.6539	1.0000	.2893	.1181	.2893	.0574
.32	.6746	1.0000	.3087	.1309	.3087	.0659
.36	.6947	1.0000	.3289	.1448	.3289	.0754
.40	.7142	1.0000	.3500	.1597	.3500	.0859
.50	.7603	1.0000	.4066	.2014	.4066	.1167
.60	.8019	1.0000	.4687	.2499	.4687	.1547
.70	.8389	1.0000	.5361	.3053	.5361	.2001
.80	.8711	1.0000	.6087	.3674	.6087	.2533
.90	.8985	1.0000	.6860	.4359	.6860	.3139
1.00	.9214	1.0000	.7677	.5103	.7677	.3816
1.50	.9831	1.0000	1.2227	.9466	1.2227	.8002
2.00	.9977	1.0000	1.7139	1.4341	1.7139	1.2840
2.34	.9995	1.0000	2.0530	1.7727	2.0530	1.6223

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.2606	.6438	.2802	.1122	.2802	.0536

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.5673	.1122	.4670

TABLE III-C-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .40 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	1.0000	-.6098	-.1220	-.6098	.0000
-1.00	.2629	1.0000	-.1092	-.0190	-.1092	.0013
-.90	.2812	1.0000	-.0924	-.0144	-.0924	.0018
-.80	.3032	1.0000	-.0742	-.0091	-.0742	.0026
-.70	.3289	1.0000	-.0545	-.0029	-.0545	.0038
-.60	.3585	1.0000	-.0329	.0046	-.0329	.0055
-.50	.3918	1.0000	-.0091	.0135	-.0091	.0079
-.40	.4286	1.0000	.0173	.0243	.0173	.0113
-.36	.4443	1.0000	.0287	.0293	.0287	.0130
-.32	.4603	1.0000	.0405	.0346	.0405	.0150
-.28	.4768	1.0000	.0528	.0404	.0528	.0172
-.24	.4937	1.0000	.0657	.0467	.0657	.0197
-.20	.5109	1.0000	.0791	.0534	.0791	.0225
-.16	.5284	1.0000	.0931	.0607	.0931	.0258
-.12	.5461	1.0000	.1076	.0685	.1076	.0294
-.08	.5640	1.0000	.1228	.0769	.1228	.0335
-.04	.5820	1.0000	.1387	.0860	.1387	.0380
.00	.6000	1.0000	.1551	.0957	.1551	.0431
.04	.6180	1.0000	.1723	.1062	.1723	.0488
.08	.6360	1.0000	.1902	.1174	.1902	.0551
.12	.6539	1.0000	.2087	.1294	.2087	.0621
.16	.6716	1.0000	.2280	.1422	.2280	.0698
.20	.6891	1.0000	.2481	.1558	.2481	.0783
.24	.7063	1.0000	.2689	.1703	.2689	.0876
.28	.7232	1.0000	.2904	.1857	.2904	.0977
.32	.7397	1.0000	.3128	.2021	.3128	.1088
.36	.7557	1.0000	.3359	.2194	.3359	.1208
.40	.7714	1.0000	.3598	.2376	.3598	.1338
.50	.8082	1.0000	.4230	.2875	.4230	.1707
.60	.8415	1.0000	.4910	.3437	.4910	.2144
.70	.8711	1.0000	.5638	.4061	.5638	.2649
.80	.8968	1.0000	.6410	.4744	.6410	.3222
.90	.9188	1.0000	.7223	.5482	.7223	.3860
1.00	.9371	1.0000	.8073	.6271	.8073	.4559
1.50	.9864	1.0000	1.2708	1.0753	1.2708	.8709
2.00	.9981	1.0000	1.7637	1.5653	1.7637	1.3382
2.30	.9995	1.0000	2.0630	1.8643	2.0630	1.6249

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.2007	.6894	.2484	.1561	.2484	.0785

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.4854	.1330	.3104

TABLE III-C-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .40 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.4000	1.0000	-1.2821	-.5128	-1.2821	.0000
-1.00	.4472	1.0000	-.2453	-.0940	-.2453	.0034
-.90	.4609	1.0000	-.2156	-.0805	-.2156	.0048
-.80	.4774	1.0000	-.1848	-.0660	-.1848	.0066
-.70	.4967	1.0000	-.1525	-.0503	-.1525	.0091
-.60	.5188	1.0000	-.1185	-.0331	-.1185	.0124
-.50	.5438	1.0000	-.0826	-.0140	-.0826	.0168
-.40	.5715	1.0000	-.0444	.0073	-.0444	.0226
-.36	.5832	1.0000	-.0284	.0165	-.0284	.0254
-.32	.5953	1.0000	-.0120	.0262	-.0120	.0285
-.28	.6076	1.0000	.0049	.0364	.0049	.0319
-.24	.6203	1.0000	.0222	.0470	.0222	.0356
-.20	.6332	1.0000	.0401	.0582	.0401	.0398
-.16	.6463	1.0000	.0584	.0699	.0584	.0444
-.12	.6596	1.0000	.0773	.0823	.0773	.0494
-.08	.6730	1.0000	.0968	.0952	.0968	.0549
-.04	.6865	1.0000	.1168	.1088	.1168	.0610
.00	.7000	1.0000	.1374	.1231	.1374	.0676
.04	.7135	1.0000	.1586	.1381	.1586	.0748
.08	.7270	1.0000	.1804	.1538	.1804	.0826
.12	.7404	1.0000	.2028	.1703	.2028	.0911
.16	.7537	1.0000	.2259	.1875	.2259	.1003
.20	.7668	1.0000	.2497	.2056	.2497	.1102
.24	.7797	1.0000	.2740	.2244	.2740	.1209
.28	.7924	1.0000	.2991	.2441	.2991	.1324
.32	.8047	1.0000	.3248	.2647	.3248	.1447
.36	.8168	1.0000	.3512	.2861	.3512	.1578
.40	.8285	1.0000	.3783	.3084	.3783	.1718
.50	.8562	1.0000	.4489	.3679	.4489	.2106
.60	.8812	1.0000	.5236	.4328	.5236	.2551
.70	.9033	1.0000	.6022	.5029	.6022	.3051
.80	.9226	1.0000	.6845	.5780	.6845	.3606
.90	.9391	1.0000	.7700	.6577	.7700	.4211
1.00	.9528	1.0000	.8584	.7414	.8584	.4861
1.50	.9898	1.0000	1.3306	1.2019	1.3306	.8597
2.00	.9986	1.0000	1.8253	1.6943	1.8253	1.2707
2.24	.9995	1.0000	2.0648	1.9336	2.0648	1.4715

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.1475	.7496	.2187	.1821	.2187	.0974

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.3938	.1577	.1836

TABLE III-C-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .40 PHI B = .60

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.6000	1.0000	-2.1028	-1.2617	-2.1028	.0000
-1.00	.6315	1.0000	-.4110	-.2422	-.4110	.0053
-.90	.6406	1.0000	-.3655	-.2133	-.3655	.0074
-.80	.6516	1.0000	-.3190	-.1832	-.3190	.0100
-.70	.6644	1.0000	-.2712	-.1518	-.2712	.0135
-.60	.6792	1.0000	-.2221	-.1188	-.2221	.0180
-.50	.6959	1.0000	-.1712	-.0838	-.1712	.0237
-.40	.7143	1.0000	-.1184	-.0466	-.1184	.0310
-.36	.7221	1.0000	-.0967	-.0310	-.0967	.0343
-.32	.7302	1.0000	-.0746	-.0150	-.0746	.0380
-.28	.7384	1.0000	-.0521	.0015	-.0521	.0421
-.24	.7469	1.0000	-.0293	.0185	-.0293	.0464
-.20	.7555	1.0000	-.0060	.0360	-.0060	.0512
-.16	.7642	1.0000	.0177	.0540	.0177	.0564
-.12	.7730	1.0000	.0419	.0726	.0419	.0619
-.08	.7820	1.0000	.0665	.0917	.0665	.0680
-.04	.7910	1.0000	.0916	.1115	.0916	.0744
.00	.8000	1.0000	.1171	.1318	.1171	.0814
.04	.8090	1.0000	.1432	.1528	.1432	.0889
.08	.8180	1.0000	.1697	.1744	.1697	.0969
.12	.8270	1.0000	.1968	.1966	.1968	.1055
.16	.8358	1.0000	.2244	.2195	.2244	.1146
.20	.8445	1.0000	.2525	.2432	.2525	.1243
.24	.8531	1.0000	.2811	.2675	.2811	.1347
.28	.8616	1.0000	.3103	.2924	.3103	.1456
.32	.8698	1.0000	.3399	.3181	.3399	.1571
.36	.8779	1.0000	.3701	.3445	.3701	.1693
.40	.8857	1.0000	.4008	.3716	.4008	.1822
.50	.9041	1.0000	.4799	.4423	.4799	.2170
.60	.9208	1.0000	.5620	.5173	.5620	.2559
.70	.9356	1.0000	.6470	.5962	.6470	.2985
.80	.9484	1.0000	.7346	.6788	.7346	.3448
.90	.9594	1.0000	.8247	.7647	.8247	.3943
1.00	.9685	1.0000	.9168	.8535	.9168	.4468
1.50	.9932	1.0000	1.3979	1.3267	1.3979	.7390
2.00	.9991	1.0000	1.8944	1.8216	1.8944	1.0537
2.16	.9995	1.0000	2.0541	1.9812	2.0541	1.1557

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.0985	.8222	.1822	.1846	.1822	.1008

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.2881	.1881	.0871

TABLE III-D-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .60 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	1.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	1.0000	.0101	.0004	.0101	.0000
-.90	.1015	1.0000	.0137	.0008	.0137	.0001
-.80	.1289	1.0000	.0183	.0013	.0183	.0001
-.70	.1611	1.0000	.0242	.0021	.0242	.0002
-.60	.1981	1.0000	.0315	.0035	.0315	.0005
-.50	.2397	1.0000	.0405	.0054	.0405	.0009
-.40	.2858	1.0000	.0514	.0083	.0514	.0017
-.36	.3053	1.0000	.0564	.0098	.0564	.0021
-.32	.3254	1.0000	.0618	.0115	.0618	.0026
-.28	.3461	1.0000	.0676	.0134	.0676	.0033
-.24	.3671	1.0000	.0737	.0156	.0737	.0041
-.20	.3886	1.0000	.0803	.0181	.0803	.0050
-.16	.4105	1.0000	.0874	.0209	.0874	.0062
-.12	.4326	1.0000	.0950	.0241	.0950	.0075
-.08	.4550	1.0000	.1030	.0277	.1030	.0091
-.04	.4774	1.0000	.1116	.0317	.1116	.0110
.00	.5000	1.0000	.1207	.0362	.1207	.0131
.04	.5226	1.0000	.1304	.0411	.1304	.0157
.08	.5450	1.0000	.1407	.0466	.1407	.0186
.12	.5674	1.0000	.1517	.0527	.1517	.0220
.16	.5895	1.0000	.1632	.0594	.1632	.0259
.20	.6114	1.0000	.1755	.0668	.1755	.0303
.24	.6329	1.0000	.1885	.0749	.1885	.0353
.28	.6539	1.0000	.2022	.0837	.2022	.0410
.32	.6746	1.0000	.2166	.0933	.2166	.0474
.36	.6947	1.0000	.2319	.1037	.2319	.0545
.40	.7142	1.0000	.2479	.1150	.2479	.0625
.50	.7603	1.0000	.2918	.1474	.2918	.0864
.60	.8019	1.0000	.3411	.1860	.3411	.1166
.70	.8389	1.0000	.3963	.2313	.3963	.1538
.80	.8711	1.0000	.4573	.2835	.4573	.1985
.90	.8985	1.0000	.5242	.3427	.5242	.2509
1.00	.9214	1.0000	.5966	.4086	.5966	.3109
1.50	.9831	1.0000	1.0250	.8196	1.0250	.7054
2.00	.9977	1.0000	1.5102	1.3011	1.5102	1.1833
2.34	.9995	1.0000	1.8486	1.6391	1.8486	1.5209

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.3003	.6645	.2094	.0884	.2094	.0441

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.7009	.0884	.5235

TABLE III-D-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .60 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	1.0000	-.4098	-.0820	-.4098	.0000
-1.00	.2629	1.0000	-.0732	-.0127	-.0732	.0008
-.90	.2812	1.0000	-.0618	-.0096	-.0618	.0012
-.80	.3032	1.0000	-.0495	-.0060	-.0495	.0018
-.70	.3289	1.0000	-.0361	-.0018	-.0361	.0026
-.60	.3585	1.0000	-.0213	.0033	-.0213	.0038
-.50	.3918	1.0000	-.0049	.0095	-.0049	.0054
-.40	.4286	1.0000	.0133	.0169	.0133	.0077
-.36	.4443	1.0000	.0212	.0204	.0212	.0089
-.32	.4603	1.0000	.0294	.0241	.0294	.0103
-.28	.4768	1.0000	.0381	.0282	.0381	.0118
-.24	.4937	1.0000	.0471	.0326	.0471	.0136
-.20	.5109	1.0000	.0566	.0373	.0566	.0156
-.16	.5284	1.0000	.0665	.0425	.0665	.0179
-.12	.5461	1.0000	.0769	.0481	.0769	.0205
-.08	.5640	1.0000	.0878	.0541	.0878	.0234
-.04	.5820	1.0000	.0992	.0606	.0992	.0267
.00	.6000	1.0000	.1112	.0677	.1112	.0304
.04	.6180	1.0000	.1237	.0754	.1237	.0346
.08	.6360	1.0000	.1369	.0836	.1369	.0392
.12	.6539	1.0000	.1506	.0925	.1506	.0444
.16	.6716	1.0000	.1650	.1020	.1650	.0501
.20	.6891	1.0000	.1801	.1123	.1801	.0565
.24	.7063	1.0000	.1959	.1233	.1959	.0636
.28	.7232	1.0000	.2124	.1351	.2124	.0713
.32	.7397	1.0000	.2296	.1477	.2296	.0799
.36	.7557	1.0000	.2476	.1611	.2476	.0892
.40	.7714	1.0000	.2664	.1755	.2664	.0994
.50	.8082	1.0000	.3169	.2154	.3169	.1290
.60	.8415	1.0000	.3728	.2615	.3728	.1648
.70	.8711	1.0000	.4340	.3140	.4340	.2073
.80	.8968	1.0000	.5007	.3730	.5007	.2568
.90	.9188	1.0000	.5726	.4383	.5726	.3133
1.00	.9371	1.0000	.6495	.5097	.6495	.3765
1.50	.9864	1.0000	1.0906	.9364	1.0906	.7717
2.00	.9981	1.0000	1.5787	1.4215	1.5787	1.2344
2.30	.9995	1.0000	1.8774	1.7200	1.8774	1.5206

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.2424	.7073	.1968	.1240	.1968	.0640

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.6194	.1057	.3564

TABLE III-D-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .60 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.4000	1.0000	-.8850	-.3540	-.8850	.0000
-1.00	.4472	1.0000	-.1687	-.0646	-.1687	.0024
-.90	.4609	1.0000	-.1480	-.0552	-.1480	.0033
-.80	.4774	1.0000	-.1264	-.0451	-.1264	.0046
-.70	.4967	1.0000	-.1037	-.0340	-.1037	.0064
-.60	.5188	1.0000	-.0797	-.0218	-.0797	.0087
-.50	.5438	1.0000	-.0541	-.0082	-.0541	.0119
-.40	.5715	1.0000	-.0267	.0070	-.0267	.0160
-.36	.5832	1.0000	-.0152	.0137	-.0152	.0180
-.32	.5953	1.0000	-.0033	.0207	-.0033	.0202
-.28	.6076	1.0000	.0090	.0281	.0090	.0227
-.24	.6203	1.0000	.0217	.0359	.0217	.0255
-.20	.6332	1.0000	.0349	.0441	.0349	.0285
-.16	.6463	1.0000	.0484	.0528	.0484	.0319
-.12	.6596	1.0000	.0625	.0620	.0625	.0356
-.08	.6730	1.0000	.0770	.0717	.0770	.0398
-.04	.6865	1.0000	.0920	.0819	.0920	.0443
.00	.7000	1.0000	.1076	.0927	.1076	.0493
.04	.7135	1.0000	.1238	.1041	.1238	.0548
.08	.7270	1.0000	.1405	.1162	.1405	.0608
.12	.7404	1.0000	.1579	.1289	.1579	.0674
.16	.7537	1.0000	.1758	.1423	.1758	.0745
.20	.7668	1.0000	.1944	.1565	.1944	.0823
.24	.7797	1.0000	.2137	.1714	.2137	.0908
.28	.7924	1.0000	.2337	.1871	.2337	.0999
.32	.8047	1.0000	.2544	.2037	.2544	.1098
.36	.8168	1.0000	.2759	.2210	.2759	.1205
.40	.8285	1.0000	.2980	.2393	.2980	.1319
.50	.8562	1.0000	.3568	.2888	.3568	.1642
.60	.8812	1.0000	.4203	.3440	.4203	.2021
.70	.9033	1.0000	.4887	.4050	.4887	.2456
.80	.9226	1.0000	.5618	.4718	.5618	.2949
.90	.9391	1.0000	.6395	.5441	.6395	.3498
1.00	.9528	1.0000	.7213	.6215	.7213	.4100
1.50	.9898	1.0000	1.1758	1.0648	1.1758	.7698
2.00	.9986	1.0000	1.6668	1.5536	1.6668	1.1777
2.24	.9995	1.0000	1.9059	1.7926	1.9059	1.3782

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.1883	.7630	.1889	.1523	.1889	.0800

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.5230	.1278	.2178

TABLE III-D-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .60 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	1.0000	-1.5306	-.9184	-1.5306	.0000
-1.00	.6315	1.0000	-.2980	-.1756	-.2980	.0039
-.90	.6406	1.0000	-.2644	-.1542	-.2644	.0054
-.80	.6516	1.0000	-.2299	-.1320	-.2299	.0074
-.70	.6644	1.0000	-.1944	-.1086	-.1944	.0100
-.60	.6792	1.0000	-.1576	-.0838	-.1576	.0133
-.50	.6959	1.0000	-.1192	-.0574	-.1192	.0177
-.40	.7143	1.0000	-.0790	-.0291	-.0790	.0232
-.36	.7221	1.0000	-.0623	-.0172	-.0623	.0258
-.32	.7302	1.0000	-.0454	-.0048	-.0454	.0286
-.28	.7384	1.0000	-.0280	.0079	-.0280	.0317
-.24	.7469	1.0000	-.0102	.0211	-.0102	.0351
-.20	.7555	1.0000	.0079	.0348	.0079	.0388
-.16	.7642	1.0000	.0265	.0489	.0265	.0429
-.12	.7730	1.0000	.0456	.0636	.0456	.0473
-.08	.7820	1.0000	.0651	.0787	.0651	.0520
-.04	.7910	1.0000	.0851	.0945	.0851	.0572
.00	.8000	1.0000	.1056	.1108	.1056	.0628
.04	.8090	1.0000	.1267	.1277	.1267	.0689
.08	.8180	1.0000	.1483	.1453	.1483	.0754
.12	.8270	1.0000	.1704	.1635	.1704	.0824
.16	.8358	1.0000	.1932	.1824	.1932	.0899
.20	.8445	1.0000	.2165	.2020	.2165	.0980
.24	.8531	1.0000	.2404	.2223	.2404	.1066
.28	.8616	1.0000	.2650	.2434	.2650	.1158
.32	.8698	1.0000	.2901	.2652	.2901	.1256
.36	.8779	1.0000	.3159	.2877	.3159	.1360
.40	.8857	1.0000	.3424	.3110	.3424	.1471
.50	.9041	1.0000	.4113	.3727	.4113	.1775
.60	.9208	1.0000	.4843	.4393	.4843	.2120
.70	.9356	1.0000	.5612	.5107	.5612	.2506
.80	.9484	1.0000	.6419	.5867	.6419	.2932
.90	.9594	1.0000	.7259	.6670	.7259	.3395
1.00	.9685	1.0000	.8131	.7510	.8131	.3891
1.50	.9932	1.0000	1.2819	1.2120	1.2819	.6738
2.00	.9991	1.0000	1.7758	1.7045	1.7758	.9870
2.16	.9995	1.0000	1.9354	1.8640	1.9354	1.0889

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.1345	.8302	.1786	.1703	.1786	.0851

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.4032	.1578	.1082

TABLE III-E-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA = 1.00 C_A^2 = .80 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	1.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	1.0000	.0050	.0002	.0050	.0000
-.90	.1015	1.0000	.0068	.0004	.0068	.0000
-.80	.1289	1.0000	.0092	.0006	.0092	.0001
-.70	.1611	1.0000	.0121	.0011	.0121	.0001
-.60	.1981	1.0000	.0158	.0017	.0158	.0002
-.50	.2397	1.0000	.0203	.0027	.0203	.0005
-.40	.2858	1.0000	.0259	.0042	.0259	.0008
-.36	.3053	1.0000	.0284	.0049	.0284	.0011
-.32	.3254	1.0000	.0312	.0058	.0312	.0013
-.28	.3461	1.0000	.0341	.0068	.0341	.0017
-.24	.3671	1.0000	.0373	.0079	.0373	.0021
-.20	.3886	1.0000	.0407	.0092	.0407	.0026
-.16	.4105	1.0000	.0444	.0107	.0444	.0032
-.12	.4326	1.0000	.0483	.0123	.0483	.0039
-.08	.4550	1.0000	.0525	.0142	.0525	.0047
-.04	.4774	1.0000	.0570	.0163	.0570	.0057
.00	.5000	1.0000	.0619	.0187	.0619	.0068
.04	.5226	1.0000	.0671	.0213	.0671	.0082
.08	.5450	1.0000	.0726	.0243	.0726	.0098
.12	.5674	1.0000	.0785	.0276	.0785	.0116
.16	.5895	1.0000	.0848	.0312	.0848	.0137
.20	.6114	1.0000	.0916	.0353	.0916	.0161
.24	.6329	1.0000	.0988	.0398	.0988	.0189
.28	.6539	1.0000	.1065	.0447	.1065	.0221
.32	.6746	1.0000	.1147	.0502	.1147	.0257
.36	.6947	1.0000	.1235	.0562	.1235	.0299
.40	.7142	1.0000	.1328	.0628	.1328	.0345
.50	.7603	1.0000	.1590	.0821	.1590	.0488
.60	.8019	1.0000	.1896	.1060	.1896	.0675
.70	.8389	1.0000	.2253	.1353	.2253	.0916
.80	.8711	1.0000	.2666	.1707	.2666	.1218
.90	.8985	1.0000	.3141	.2128	.3141	.1591
1.00	.9214	1.0000	.3681	.2620	.3681	.2039
1.50	.9831	1.0000	.7342	.6136	.7342	.5417
2.00	.9977	1.0000	1.2024	1.0783	1.2024	1.0029
2.34	.9995	1.0000	1.5388	1.4143	1.5388	1.3385

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.3647	.6970	.1245	.0570	.1245	.0304

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.9257	.0570	.6227

TABLE III-E-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA = 1.00 C_A^2 = .80 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	1.0000	-.2066	-.0413	-.2066	.0000
-1.00	.2629	1.0000	-.0368	-.0064	-.0368	.0004
-.90	.2812	1.0000	-.0310	-.0048	-.0310	.0006
-.80	.3032	1.0000	-.0248	-.0030	-.0248	.0009
-.70	.3289	1.0000	-.0179	-.0008	-.0179	.0013
-.60	.3585	1.0000	-.0103	.0018	-.0103	.0019
-.50	.3918	1.0000	-.0019	.0050	-.0019	.0028
-.40	.4286	1.0000	.0076	.0089	.0076	.0040
-.36	.4443	1.0000	.0117	.0107	.0117	.0046
-.32	.4603	1.0000	.0160	.0126	.0160	.0053
-.28	.4768	1.0000	.0206	.0147	.0206	.0061
-.24	.4937	1.0000	.0254	.0171	.0254	.0071
-.20	.5109	1.0000	.0304	.0196	.0304	.0081
-.16	.5284	1.0000	.0357	.0223	.0357	.0094
-.12	.5461	1.0000	.0413	.0254	.0413	.0107
-.08	.5640	1.0000	.0472	.0286	.0472	.0123
-.04	.5820	1.0000	.0534	.0322	.0534	.0141
.00	.6000	1.0000	.0600	.0361	.0600	.0162
.04	.6180	1.0000	.0669	.0403	.0669	.0184
.08	.6360	1.0000	.0742	.0449	.0742	.0210
.12	.6539	1.0000	.0820	.0499	.0820	.0239
.16	.6716	1.0000	.0901	.0553	.0901	.0272
.20	.6891	1.0000	.0988	.0612	.0988	.0309
.24	.7063	1.0000	.1079	.0676	.1079	.0350
.28	.7232	1.0000	.1176	.0745	.1176	.0395
.32	.7397	1.0000	.1278	.0820	.1278	.0446
.36	.7557	1.0000	.1387	.0900	.1387	.0502
.40	.7714	1.0000	.1501	.0988	.1501	.0564
.50	.8082	1.0000	.1817	.1238	.1817	.0749
.60	.8415	1.0000	.2180	.1537	.2180	.0982
.70	.8711	1.0000	.2596	.1894	.2596	.1271
.80	.8968	1.0000	.3069	.2312	.3069	.1622
.90	.9188	1.0000	.3603	.2797	.3603	.2041
1.00	.9371	1.0000	.4201	.3352	.4201	.2533
1.50	.9864	1.0000	.8066	.7094	.8066	.6002
2.00	.9981	1.0000	1.2808	1.1808	1.2808	1.0497
2.30	.9995	1.0000	1.5781	1.4777	1.5781	1.3345

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3107	.7359	.1254	.0802	.1254	.0434

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.8473	.0689	.4376

TABLE III-E-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .80 PHI B = .40

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.4000	1.0000	-.4587	-.1835	-.4587	.0000
-1.00	.4472	1.0000	-.0871	-.0334	-.0871	.0012
-.90	.4609	1.0000	-.0763	-.0284	-.0763	.0017
-.80	.4774	1.0000	-.0649	-.0231	-.0649	.0024
-.70	.4967	1.0000	-.0529	-.0172	-.0529	.0033
-.60	.5188	1.0000	-.0401	-.0107	-.0401	.0046
-.50	.5438	1.0000	-.0264	-.0035	-.0264	.0063
-.40	.5715	1.0000	-.0115	.0048	-.0115	.0085
-.36	.5832	1.0000	-.0052	.0085	-.0052	.0096
-.32	.5953	1.0000	.0013	.0123	.0013	.0108
-.28	.6076	1.0000	.0081	.0164	.0081	.0122
-.24	.6203	1.0000	.0151	.0207	.0151	.0137
-.20	.6332	1.0000	.0224	.0253	.0224	.0154
-.16	.6463	1.0000	.0300	.0301	.0300	.0173
-.12	.6596	1.0000	.0379	.0353	.0379	.0194
-.08	.6730	1.0000	.0462	.0408	.0462	.0218
-.04	.6865	1.0000	.0548	.0467	.0548	.0244
.00	.7000	1.0000	.0639	.0529	.0639	.0273
.04	.7135	1.0000	.0733	.0596	.0733	.0305
.08	.7270	1.0000	.0831	.0667	.0831	.0340
.12	.7404	1.0000	.0934	.0743	.0934	.0379
.16	.7537	1.0000	.1042	.0823	.1042	.0422
.20	.7668	1.0000	.1156	.0909	.1156	.0470
.24	.7797	1.0000	.1274	.1001	.1274	.0522
.28	.7924	1.0000	.1399	.1099	.1399	.0578
.32	.8047	1.0000	.1529	.1203	.1529	.0641
.36	.8168	1.0000	.1666	.1314	.1666	.0709
.40	.8285	1.0000	.1809	.1432	.1809	.0783
.50	.8562	1.0000	.2200	.1761	.2200	.0998
.60	.8812	1.0000	.2639	.2143	.2639	.1260
.70	.9033	1.0000	.3132	.2583	.3132	.1573
.80	.9226	1.0000	.3681	.3084	.3681	.1944
.90	.9391	1.0000	.4289	.3651	.4289	.2374
1.00	.9528	1.0000	.4956	.4282	.4956	.2864
1.50	.9898	1.0000	.9051	.8278	.9051	.6109
2.00	.9986	1.0000	1.3855	1.3060	1.3855	1.0101
2.24	.9995	1.0000	1.6236	1.5439	1.6236	1.2097

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.2575	.7853	.1328	.1043	.1328	.0546

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.7492	.0854	.2794

TABLE III-E-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .80 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	1.0000	-.8427	-.5056	-.8427	.0000
-1.00	.6315	1.0000	-.1633	-.0962	-.1633	.0022
-.90	.6406	1.0000	-.1445	-.0842	-.1445	.0030
-.80	.6516	1.0000	-.1251	-.0717	-.1251	.0041
-.70	.6644	1.0000	-.1050	-.0585	-.1050	.0056
-.60	.6792	1.0000	-.0839	-.0443	-.0839	.0075
-.50	.6959	1.0000	-.0618	-.0291	-.0618	.0100
-.40	.7143	1.0000	-.0384	-.0126	-.0384	.0132
-.36	.7221	1.0000	-.0286	-.0056	-.0286	.0147
-.32	.7302	1.0000	-.0186	.0017	-.0186	.0164
-.28	.7384	1.0000	-.0083	.0093	-.0083	.0183
-.24	.7469	1.0000	.0024	.0172	.0024	.0203
-.20	.7555	1.0000	.0133	.0254	.0133	.0225
-.16	.7642	1.0000	.0246	.0340	.0246	.0250
-.12	.7730	1.0000	.0363	.0430	.0363	.0277
-.08	.7820	1.0000	.0483	.0523	.0483	.0306
-.04	.7910	1.0000	.0608	.0621	.0608	.0339
.00	.8000	1.0000	.0737	.0724	.0737	.0374
.04	.8090	1.0000	.0870	.0831	.0870	.0412
.08	.8180	1.0000	.1009	.0944	.1009	.0454
.12	.8270	1.0000	.1152	.1062	.1152	.0499
.16	.8358	1.0000	.1301	.1185	.1301	.0549
.20	.8445	1.0000	.1455	.1315	.1455	.0602
.24	.8531	1.0000	.1616	.1451	.1616	.0660
.28	.8616	1.0000	.1782	.1594	.1782	.0722
.32	.8698	1.0000	.1955	.1744	.1955	.0790
.36	.8779	1.0000	.2135	.1901	.2135	.0862
.40	.8857	1.0000	.2322	.2065	.2322	.0940
.50	.9041	1.0000	.2820	.2512	.2820	.1160
.60	.9208	1.0000	.3368	.3011	.3368	.1419
.70	.9356	1.0000	.3966	.3567	.3966	.1719
.80	.9484	1.0000	.4616	.4180	.4616	.2063
.90	.9594	1.0000	.5318	.4850	.5318	.2449
1.00	.9685	1.0000	.6071	.5575	.6071	.2878
1.50	.9932	1.0000	1.0426	.9860	1.0426	.5525
2.00	.9991	1.0000	1.5293	1.4712	1.5293	.8610
2.16	.9995	1.0000	1.6883	1.6301	1.6883	.9626

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.2002	.8446	.1456	.1316	.1456	.0602

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.6173	.1105	.1480

TABLE III-F-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 1.00 C_A^2 = .90 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	1.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	1.0000	.0025	.0001	.0025	.0000
-.90	.1015	1.0000	.0034	.0002	.0034	.0000
-.80	.1289	1.0000	.0046	.0003	.0046	.0000
-.70	.1611	1.0000	.0061	.0005	.0061	.0001
-.60	.1981	1.0000	.0079	.0009	.0079	.0001
-.50	.2397	1.0000	.0102	.0014	.0102	.0002
-.40	.2858	1.0000	.0130	.0021	.0130	.0004
-.36	.3053	1.0000	.0143	.0025	.0143	.0005
-.32	.3254	1.0000	.0157	.0029	.0157	.0007
-.28	.3461	1.0000	.0172	.0034	.0172	.0008
-.24	.3671	1.0000	.0188	.0040	.0188	.0010
-.20	.3886	1.0000	.0205	.0047	.0205	.0013
-.16	.4105	1.0000	.0224	.0054	.0224	.0016
-.12	.4326	1.0000	.0244	.0062	.0244	.0020
-.08	.4550	1.0000	.0265	.0072	.0265	.0024
-.04	.4774	1.0000	.0289	.0083	.0289	.0029
.00	.5000	1.0000	.0313	.0095	.0313	.0035
.04	.5226	1.0000	.0340	.0109	.0340	.0042
.08	.5450	1.0000	.0369	.0124	.0369	.0050
.12	.5674	1.0000	.0400	.0141	.0400	.0060
.16	.5895	1.0000	.0433	.0160	.0433	.0071
.20	.6114	1.0000	.0468	.0182	.0468	.0083
.24	.6329	1.0000	.0507	.0206	.0507	.0098
.28	.6539	1.0000	.0548	.0232	.0548	.0115
.32	.6746	1.0000	.0592	.0261	.0592	.0135
.36	.6947	1.0000	.0639	.0294	.0639	.0157
.40	.7142	1.0000	.0690	.0330	.0690	.0182
.50	.7603	1.0000	.0835	.0437	.0835	.0261
.60	.8019	1.0000	.1009	.0573	.1009	.0368
.70	.8389	1.0000	.1218	.0744	.1218	.0509
.80	.8711	1.0000	.1469	.0959	.1469	.0693
.90	.8985	1.0000	.1770	.1226	.1770	.0929
1.00	.9214	1.0000	.2129	.1553	.2129	.1226
1.50	.9831	1.0000	.4991	.4305	.4991	.3874
2.00	.9977	1.0000	.9374	.8656	.9374	.8193
2.34	.9995	1.0000	1.2700	1.1977	1.2700	1.1510

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.4238	.7255	.0722	.0353	.0722	.0199

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.1423	.0353	.7222

TABLE III-F-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA = 1.00 C_A^2 = .90 PHI B = .20

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.2000	1.0000	-.1037	-.0207	-.1037	.0000
-1.00	.2629	1.0000	-.0185	-.0032	-.0185	.0002
-.90	.2812	1.0000	-.0155	-.0024	-.0155	.0003
-.80	.3032	1.0000	-.0124	-.0015	-.0124	.0005
-.70	.3289	1.0000	-.0089	-.0004	-.0089	.0007
-.60	.3585	1.0000	-.0051	.0009	-.0051	.0010
-.50	.3918	1.0000	-.0008	.0025	-.0008	.0014
-.40	.4286	1.0000	.0040	.0045	.0040	.0020
-.36	.4443	1.0000	.0062	.0054	.0062	.0023
-.32	.4603	1.0000	.0084	.0065	.0084	.0027
-.28	.4768	1.0000	.0107	.0075	.0107	.0031
-.24	.4937	1.0000	.0132	.0087	.0132	.0036
-.20	.5109	1.0000	.0158	.0100	.0158	.0042
-.16	.5284	1.0000	.0185	.0115	.0185	.0048
-.12	.5461	1.0000	.0214	.0130	.0214	.0055
-.08	.5640	1.0000	.0245	.0147	.0245	.0063
-.04	.5820	1.0000	.0277	.0166	.0277	.0073
.00	.6000	1.0000	.0312	.0186	.0312	.0083
.04	.6180	1.0000	.0349	.0209	.0349	.0096
.08	.6360	1.0000	.0387	.0233	.0387	.0109
.12	.6539	1.0000	.0429	.0260	.0429	.0125
.16	.6716	1.0000	.0473	.0289	.0473	.0142
.20	.6891	1.0000	.0519	.0321	.0519	.0162
.24	.7063	1.0000	.0569	.0355	.0569	.0184
.28	.7232	1.0000	.0622	.0393	.0622	.0209
.32	.7397	1.0000	.0678	.0434	.0678	.0237
.36	.7557	1.0000	.0738	.0479	.0738	.0268
.40	.7714	1.0000	.0803	.0528	.0803	.0303
.50	.8082	1.0000	.0983	.0671	.0983	.0409
.60	.8415	1.0000	.1197	.0848	.1197	.0546
.70	.8711	1.0000	.1450	.1064	.1450	.0722
.80	.8968	1.0000	.1749	.1329	.1749	.0944
.90	.9188	1.0000	.2102	.1650	.2102	.1221
1.00	.9371	1.0000	.2516	.2034	.2516	.1562
1.50	.9864	1.0000	.5639	.5060	.5639	.4370
2.00	.9981	1.0000	1.0131	.9525	1.0131	.8628
2.30	.9995	1.0000	1.3074	1.2465	1.3074	1.1448

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.3739	.7612	.0760	.0496	.0760	.0280

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
1.0687	.0430	.5194

TABLE III-F-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA = 1.00 C_A^2 = .90 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.4000	1.0000	-.2336	-.0935	-.2336	.0000
-1.00	.4472	1.0000	-.0443	-.0170	-.0443	.0006
-.90	.4609	1.0000	-.0387	-.0144	-.0387	.0009
-.80	.4774	1.0000	-.0329	-.0117	-.0329	.0012
-.70	.4967	1.0000	-.0267	-.0087	-.0267	.0017
-.60	.5188	1.0000	-.0201	-.0053	-.0201	.0024
-.50	.5438	1.0000	-.0130	-.0015	-.0130	.0032
-.40	.5715	1.0000	-.0052	.0028	-.0052	.0044
-.36	.5832	1.0000	-.0019	.0047	-.0019	.0050
-.32	.5953	1.0000	.0015	.0067	.0015	.0056
-.28	.6076	1.0000	.0051	.0089	.0051	.0063
-.24	.6203	1.0000	.0088	.0111	.0088	.0071
-.20	.6332	1.0000	.0127	.0136	.0127	.0080
-.16	.6463	1.0000	.0167	.0162	.0167	.0091
-.12	.6596	1.0000	.0210	.0189	.0210	.0102
-.08	.6730	1.0000	.0254	.0219	.0254	.0114
-.04	.6865	1.0000	.0301	.0251	.0301	.0129
.00	.7000	1.0000	.0349	.0284	.0349	.0144
.04	.7135	1.0000	.0401	.0321	.0401	.0162
.08	.7270	1.0000	.0455	.0360	.0455	.0181
.12	.7404	1.0000	.0512	.0401	.0512	.0203
.16	.7537	1.0000	.0572	.0446	.0572	.0227
.20	.7668	1.0000	.0635	.0495	.0635	.0253
.24	.7797	1.0000	.0702	.0546	.0702	.0282
.28	.7924	1.0000	.0773	.0602	.0773	.0315
.32	.8047	1.0000	.0848	.0662	.0848	.0351
.36	.8168	1.0000	.0928	.0726	.0928	.0390
.40	.8285	1.0000	.1012	.0796	.1012	.0434
.50	.8562	1.0000	.1245	.0993	.1245	.0562
.60	.8812	1.0000	.1517	.1229	.1517	.0724
.70	.9033	1.0000	.1833	.1511	.1833	.0925
.80	.9226	1.0000	.2200	.1846	.2200	.1173
.90	.9391	1.0000	.2624	.2241	.2624	.1473
1.00	.9528	1.0000	.3112	.2702	.3112	.1832
1.50	.9898	1.0000	.6550	.6060	.6550	.4560
2.00	.9986	1.0000	1.1156	1.0646	1.1156	.8388
2.24	.9995	1.0000	1.3518	1.3005	1.3518	1.0368

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3234	.8058	.0855	.0667	.0855	.0354

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.9737	.0542	.3422

TABLE III-F-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA = 1.00 C_A^2 = .90 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	1.0000	-.4438	-.2663	-.4438	.0000
-1.00	.6315	1.0000	-.0857	-.0505	-.0857	.0011
-.90	.6406	1.0000	-.0757	-.0441	-.0757	.0016
-.80	.6516	1.0000	-.0654	-.0375	-.0654	.0022
-.70	.6644	1.0000	-.0546	-.0304	-.0546	.0030
-.60	.6792	1.0000	-.0433	-.0228	-.0433	.0040
-.50	.6959	1.0000	-.0313	-.0145	-.0313	.0054
-.40	.7143	1.0000	-.0186	-.0056	-.0186	.0071
-.36	.7221	1.0000	-.0132	-.0017	-.0132	.0079
-.32	.7302	1.0000	-.0077	.0023	-.0077	.0089
-.28	.7384	1.0000	-.0020	.0065	-.0020	.0099
-.24	.7469	1.0000	.0039	.0109	.0039	.0110
-.20	.7555	1.0000	.0100	.0155	.0100	.0123
-.16	.7642	1.0000	.0163	.0203	.0163	.0136
-.12	.7730	1.0000	.0229	.0253	.0229	.0152
-.08	.7820	1.0000	.0297	.0306	.0297	.0168
-.04	.7910	1.0000	.0368	.0362	.0368	.0187
.00	.8000	1.0000	.0442	.0421	.0442	.0207
.04	.8090	1.0000	.0519	.0483	.0519	.0229
.08	.8180	1.0000	.0600	.0548	.0600	.0253
.12	.8270	1.0000	.0684	.0618	.0684	.0280
.16	.8358	1.0000	.0772	.0691	.0772	.0309
.20	.8445	1.0000	.0864	.0768	.0864	.0341
.24	.8531	1.0000	.0961	.0850	.0961	.0376
.28	.8616	1.0000	.1062	.0937	.1062	.0414
.32	.8698	1.0000	.1168	.1029	.1168	.0455
.36	.8779	1.0000	.1280	.1127	.1280	.0500
.40	.8857	1.0000	.1398	.1231	.1398	.0549
.50	.9041	1.0000	.1719	.1518	.1719	.0691
.60	.9208	1.0000	.2084	.1851	.2084	.0864
.70	.9356	1.0000	.2498	.2236	.2498	.1072
.80	.9484	1.0000	.2967	.2678	.2967	.1319
.90	.9594	1.0000	.3495	.3182	.3495	.1610
1.00	.9685	1.0000	.4086	.3751	.4086	.1947
1.50	.9932	1.0000	.7914	.7519	.7914	.4276
2.00	.9991	1.0000	1.2643	1.2233	1.2643	.7274
2.16	.9995	1.0000	1.4223	1.3812	1.4223	.8283

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.2665	.8587	.1027	.0907	.1027	.0401

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.8404	.0727	.1903

TABLE IV-A-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .CO PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	2.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	1.9214	.0128	.0005	.0251	.0000
-.90	.1015	1.8985	.0175	.0010	.0341	.0001
-.80	.1289	1.8711	.0236	.0017	.0456	.0001
-.70	.1611	1.8389	.0314	.0028	.0601	.0003
-.60	.1981	1.8019	.0413	.0046	.0780	.0006
-.50	.2397	1.7603	.0536	.0073	.0998	.0012
-.40	.2858	1.7142	.0687	.0113	.1261	.0023
-.36	.3053	1.6947	.0756	.0133	.1379	.0029
-.32	.3254	1.6746	.0831	.0157	.1505	.0036
-.28	.3461	1.6539	.0912	.0184	.1639	.0045
-.24	.3671	1.6329	.0998	.0215	.1782	.0056
-.20	.3886	1.6114	.1092	.0250	.1933	.0070
-.16	.4105	1.5895	.1191	.0290	.2093	.0086
-.12	.4326	1.5674	.1298	.0335	.2262	.0105
-.08	.4550	1.5450	.1412	.0386	.2439	.0127
-.04	.4774	1.5226	.1534	.0442	.2626	.0154
.00	.5000	1.5000	.1663	.0506	.2821	.0185
.04	.5226	1.4774	.1801	.0576	.3026	.0221
.08	.5450	1.4550	.1946	.0654	.3239	.0262
.12	.5674	1.4326	.2100	.0739	.3462	.0310
.16	.5895	1.4105	.2263	.0834	.3693	.0364
.20	.6114	1.3886	.2435	.0937	.3933	.0426
.24	.6329	1.3671	.2615	.1049	.4182	.0496
.28	.6539	1.3461	.2805	.1171	.4439	.0575
.32	.6746	1.3254	.3004	.1303	.4705	.0663
.36	.6947	1.3053	.3212	.1446	.4979	.0760
.40	.7142	1.2858	.3430	.1599	.5261	.0868
.50	.7603	1.2397	.4014	.2030	.5998	.1187
.60	.8019	1.1981	.4656	.2532	.6780	.1579
.70	.8389	1.1611	.5352	.3104	.7601	.2048
.80	.8711	1.1289	.6099	.3743	.8456	.2595
.90	.8985	1.1015	.6894	.4446	.9341	.3218
1.00	.9214	1.0786	.7729	.5206	1.0251	.3910
1.50	.9831	1.0169	1.2332	.9621	1.5043	.8145
2.00	.9977	1.0023	1.7256	1.4508	2.0005	1.2995
2.34	.9995	1.0005	2.0648	1.7895	2.3401	1.6378

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.2691	.6482	.2753	.1137	.4368	.0553

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.5505	.1137	.5505

TABLE IV-A-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .00 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	2.0000	-.5000	-.1000	-1.0000	.0000
-1.00	.2629	1.9214	-.0884	-.0153	-.1799	.0010
-.90	.2812	1.8985	-.0742	-.0114	-.1527	.0015
-.80	.3032	1.8711	-.0587	-.0069	-.1235	.0022
-.70	.3289	1.8389	-.0417	-.0015	-.0920	.0033
-.60	.3585	1.8019	-.0229	.0050	-.0576	.0047
-.50	.3918	1.7603	-.0018	.0129	-.0201	.0068
-.40	.4286	1.7142	.0218	.0225	.0209	.0099
-.36	.4443	1.6947	.0320	.0270	.0383	.0114
-.32	.4603	1.6746	.0428	.0319	.0564	.0132
-.28	.4768	1.6539	.0540	.0372	.0751	.0152
-.24	.4937	1.6329	.0659	.0429	.0946	.0175
-.20	.5109	1.6114	.0782	.0491	.1147	.0202
-.16	.5284	1.5895	.0912	.0559	.1354	.0231
-.12	.5461	1.5674	.1048	.0632	.1569	.0265
-.08	.5640	1.5450	.1191	.0711	.1791	.0304
-.04	.5820	1.5226	.1341	.0797	.2020	.0347
.00	.6000	1.5000	.1497	.0889	.2257	.0395
.04	.6180	1.4774	.1661	.0989	.2500	.0449
.08	.6360	1.4550	.1832	.1096	.2751	.0510
.12	.6539	1.4326	.2010	.1211	.3009	.0577
.16	.6716	1.4105	.2197	.1335	.3274	.0651
.20	.6891	1.3886	.2391	.1467	.3547	.0734
.24	.7063	1.3671	.2594	.1609	.3826	.0824
.28	.7232	1.3461	.2805	.1759	.4111	.0924
.32	.7397	1.3254	.3024	.1920	.4404	.1032
.36	.7557	1.3053	.3251	.2090	.4703	.1150
.40	.7714	1.2858	.3487	.2270	.5009	.1278
.50	.8082	1.2397	.4113	.2764	.5799	.1644
.60	.8415	1.1981	.4790	.3323	.6624	.2079
.70	.8711	1.1611	.5517	.3946	.7480	.2583
.80	.8968	1.1289	.6290	.4629	.8365	.3157
.90	.9188	1.1015	.7104	.5369	.9273	.3796
1.00	.9371	1.0786	.7956	.6160	1.0201	.4496
1.50	.9864	1.0169	1.2599	1.0650	1.5035	.8654
2.00	.9981	1.0023	1.7531	1.5552	2.0004	1.3328
2.30	.9995	1.0006	2.0524	1.8542	2.3001	1.6196

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.2171	.6965	.2477	.1527	.3665	.0772

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.4953	.1289	.3964

TABLE IV-A-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .CO PHI B = .40

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.CO	.4000	2.0000	-1.0000	-.4000	-2.0000	.0000
-1.CO	.4472	1.9214	-.1897	-.0726	-.3849	.0027
-.90	.4609	1.8985	-.1660	-.0618	-.3395	.0038
-.80	.4774	1.8711	-.1411	-.0502	-.2926	.0053
-.70	.4967	1.8389	-.1149	-.0374	-.2440	.0073
-.60	.5188	1.8019	-.0870	-.0232	-.1932	.0100
-.50	.5438	1.7603	-.0572	-.0074	-.1401	.0137
-.40	.5715	1.7142	-.0251	.0105	-.0844	.0185
-.36	.5832	1.6947	-.0115	.0183	-.0613	.0209
-.32	.5953	1.6746	.0025	.0266	-.0377	.0235
-.28	.6076	1.6539	.0169	.0353	-.0136	.0264
-.24	.6203	1.6329	.0319	.0444	.0109	.0297
-.20	.6332	1.6114	.0473	.0541	.0360	.0333
-.16	.6463	1.5895	.0633	.0644	.0616	.0372
-.12	.6596	1.5674	.0799	.0752	.0877	.0417
-.C8	.6730	1.5450	.0970	.0866	.1143	.0465
-.C4	.6865	1.5226	.1147	.0986	.1415	.0519
.CO	.7000	1.5000	.1331	.1113	.1693	.0578
.C4	.7135	1.4774	.1521	.1248	.1975	.0642
.C8	.7270	1.4550	.1717	.1389	.2263	.0713
.12	.7404	1.4326	.1920	.1538	.2557	.0790
.16	.7537	1.4105	.2131	.1695	.2856	.0873
.20	.7668	1.3886	.2348	.1861	.3160	.0964
.24	.7797	1.3671	.2572	.2034	.3469	.1063
.28	.7924	1.3461	.2804	.2217	.3784	.1169
.32	.8047	1.3254	.3043	.2408	.4103	.1283
.36	.8168	1.3053	.3290	.2607	.4427	.1406
.40	.8285	1.2858	.3544	.2816	.4756	.1537
.50	.8562	1.2397	.4211	.3379	.5599	.1904
.60	.8812	1.1981	.4925	.3999	.6468	.2329
.70	.9033	1.1611	.5682	.4674	.7360	.2811
.80	.9226	1.1289	.6480	.5403	.8274	.3349
.90	.9391	1.1015	.7315	.6181	.9205	.3939
1.CO	.9528	1.0786	.8183	.7002	1.0151	.4578
1.50	.9898	1.0169	1.2866	1.1569	1.5026	.8283
2.00	.9986	1.0023	1.7805	1.6486	2.0003	1.2387
2.24	.9995	1.0008	2.0199	1.8879	2.2401	1.4395

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.1731	.7580	.2201	.1749	.2955	.0903

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.4402	.1448	.2642

TABLE IV-A-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA = 2.00 C_A^2 = .00 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	2.0000	-1.5000	-.9000	-3.0000	.0000
-1.00	.6315	1.9214	-.2910	-.1714	-.5899	.0039
-.90	.6406	1.8985	-.2577	-.1503	-.5264	.0053
-.80	.6516	1.8711	-.2235	-.1281	-.4618	.0073
-.70	.6644	1.8389	-.1880	-.1048	-.3960	.0099
-.60	.6792	1.8019	-.1511	-.0800	-.3288	.0132
-.50	.6959	1.7603	-.1125	-.0535	-.2601	.0176
-.40	.7143	1.7142	-.0719	-.0249	-.1896	.0232
-.36	.7221	1.6947	-.0551	-.0128	-.1608	.0258
-.32	.7302	1.6746	-.0378	-.0003	-.1318	.0287
-.28	.7384	1.6539	-.0202	.0127	-.1024	.0318
-.24	.7469	1.6329	-.0021	.0261	-.0727	.0353
-.20	.7555	1.6114	.0164	.0400	-.0427	.0391
-.16	.7642	1.5895	.0354	.0545	-.0123	.0432
-.12	.7730	1.5674	.0549	.0694	.0185	.0477
-.08	.7820	1.5450	.0749	.0850	.0496	.0526
-.04	.7910	1.5226	.0954	.1011	.0810	.0579
.00	.8000	1.5000	.1164	.1179	.1128	.0636
.04	.8090	1.4774	.1380	.1353	.1450	.0699
.08	.8180	1.4550	.1602	.1533	.1776	.0766
.12	.8270	1.4326	.1830	.1721	.2105	.0838
.16	.8358	1.4105	.2064	.1915	.2437	.0915
.20	.8445	1.3886	.2304	.2117	.2773	.0998
.24	.8531	1.3671	.2551	.2326	.3113	.1087
.28	.8616	1.3461	.2804	.2543	.3456	.1182
.32	.8698	1.3254	.3063	.2767	.3802	.1283
.36	.8779	1.3053	.3329	.3000	.4152	.1390
.40	.8857	1.2858	.3601	.3240	.4504	.1504
.50	.9041	1.2397	.4310	.3874	.5399	.1817
.60	.9208	1.1981	.5059	.4558	.6312	.2171
.70	.9356	1.1611	.5846	.5289	.7240	.2566
.80	.9484	1.1289	.6670	.6065	.8182	.3001
.90	.9594	1.1015	.7525	.6881	.9136	.3472
1.00	.9685	1.0786	.8410	.7734	1.0101	.3976
1.50	.9932	1.0169	1.3132	1.2378	1.5017	.6844
2.00	.9991	1.0023	1.8079	1.7310	2.0002	.9980
2.16	.9995	1.0011	1.9676	1.8905	2.1601	1.0999

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.1364	.8306	.1925	.1799	.2240	.0869

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.3850	.1610	.1541

TABLE IV-B-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .20 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	2.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	1.9214	.0103	.0004	.0201	.0000
-.90	.1015	1.8985	.0140	.0008	.0273	.0001
-.80	.1289	1.8711	.0189	.0013	.0365	.0001
-.70	.1611	1.8389	.0252	.0022	.0481	.0003
-.60	.1981	1.8019	.0331	.0037	.0625	.0005
-.50	.2397	1.7603	.0429	.0058	.0801	.0010
-.40	.2858	1.7142	.0551	.0090	.1012	.0018
-.36	.3053	1.6947	.0607	.0107	.1108	.0023
-.32	.3254	1.6746	.0668	.0126	.1210	.0029
-.28	.3461	1.6539	.0733	.0148	.1319	.0037
-.24	.3671	1.6329	.0804	.0173	.1435	.0046
-.20	.3886	1.6114	.0880	.0202	.1558	.0056
-.16	.4105	1.5895	.0961	.0235	.1688	.0070
-.12	.4326	1.5674	.1049	.0271	.1826	.0085
-.08	.4550	1.5450	.1143	.0313	.1972	.0104
-.04	.4774	1.5226	.1243	.0360	.2126	.0125
.00	.5000	1.5000	.1350	.0412	.2287	.0151
.04	.5226	1.4774	.1463	.0470	.2457	.0181
.08	.5450	1.4550	.1585	.0535	.2634	.0215
.12	.5674	1.4326	.1713	.0607	.2820	.0255
.16	.5895	1.4105	.1850	.0686	.3015	.0301
.20	.6114	1.3886	.1995	.0773	.3217	.0353
.24	.6329	1.3671	.2148	.0868	.3428	.0412
.28	.6539	1.3461	.2310	.0972	.3647	.0479
.32	.6746	1.3254	.2480	.1085	.3875	.0555
.36	.6947	1.3053	.2660	.1208	.4111	.0639
.40	.7142	1.2858	.2848	.1341	.4355	.0732
.50	.7603	1.2397	.3360	.1719	.5001	.1011
.60	.8019	1.1981	.3930	.2165	.5696	.1360
.70	.8389	1.1611	.4559	.2681	.6437	.1784
.80	.8711	1.1289	.5245	.3268	.7222	.2286
.90	.8985	1.1015	.5984	.3922	.8046	.2866
1.00	.9214	1.0786	.6772	.4640	.8905	.3519
1.50	.9831	1.0169	1.1247	.8932	1.3562	.7637
2.00	.9977	1.0023	1.6144	1.3791	1.8496	1.2460
2.34	.9995	1.0005	1.9532	1.7176	2.1889	1.5841

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.2911	.6597	.2356	.1003	.3710	.0500

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.6224	.1003	.5891

TABLE IV-B-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .20 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	2.0000	-.4016	-.0803	-.8032	.0000
-1.00	.2629	1.9214	-.0709	-.0123	-.1443	.0008
-.90	.2812	1.8985	-.0595	-.0091	-.1224	.0012
-.80	.3032	1.8711	-.0470	-.0055	-.0988	.0018
-.70	.3289	1.8389	-.0332	-.0011	-.0733	.0026
-.60	.3585	1.8019	-.0179	.0041	-.0455	.0038
-.50	.3918	1.7603	-.0008	.0105	-.0150	.0055
-.40	.4286	1.7142	.0184	.0184	.0184	.0080
-.36	.4443	1.6947	.0268	.0221	.0327	.0093
-.32	.4603	1.6746	.0356	.0261	.0476	.0107
-.28	.4768	1.6539	.0449	.0304	.0630	.0124
-.24	.4937	1.6329	.0546	.0351	.0789	.0143
-.20	.5109	1.6114	.0648	.0403	.0955	.0165
-.16	.5284	1.5895	.0756	.0459	.1127	.0189
-.12	.5461	1.5674	.0869	.0519	.1306	.0218
-.08	.5640	1.5450	.0988	.0585	.1491	.0249
-.04	.5820	1.5226	.1113	.0657	.1682	.0285
.00	.6000	1.5000	.1244	.0735	.1881	.0326
.04	.6180	1.4774	.1382	.0818	.2086	.0372
.08	.6360	1.4550	.1526	.0909	.2298	.0423
.12	.6539	1.4326	.1678	.1007	.2517	.0480
.16	.6716	1.4105	.1837	.1112	.2743	.0543
.20	.6891	1.3886	.2004	.1226	.2976	.0614
.24	.7063	1.3671	.2178	.1347	.3216	.0692
.28	.7232	1.3461	.2360	.1478	.3464	.0778
.32	.7397	1.3254	.2551	.1617	.3718	.0872
.36	.7557	1.3053	.2750	.1766	.3980	.0975
.40	.7714	1.2858	.2957	.1924	.4248	.1088
.50	.8082	1.2397	.3513	.2364	.4950	.1413
.60	.8415	1.1981	.4123	.2867	.5693	.1804
.70	.8711	1.1611	.4787	.3436	.6476	.2265
.80	.8968	1.1289	.5503	.4069	.7295	.2797
.90	.9188	1.1015	.6268	.4764	.8148	.3397
1.00	.9371	1.0786	.7078	.5516	.9030	.4063
1.50	.9864	1.0169	1.1607	.9897	1.3744	.8120
2.00	.9981	1.0023	1.6515	1.4775	1.8690	1.2772
2.30	.9995	1.0006	1.9505	1.7762	2.1684	1.5637

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.2402	.7064	.2179	.1348	.3217	.0692

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.5673	.1140	.4290

TABLE IV-B-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .20 PHI B = .40

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.4000	2.0000	-.8130	-.3252	-1.6260	.0000
-1.00	.4472	1.9214	-.1540	-.0589	-.3124	.0022
-.90	.4609	1.8985	-.1346	-.0501	-.2753	.0031
-.80	.4774	1.8711	-.1142	-.0405	-.2369	.0043
-.70	.4967	1.8389	-.0926	-.0301	-.1969	.0060
-.60	.5188	1.8019	-.0697	-.0184	-.1552	.0082
-.50	.5438	1.7603	-.0451	-.0053	-.1113	.0112
-.40	.5715	1.7142	-.0184	.0095	-.0650	.0153
-.36	.5832	1.6947	-.0071	.0160	-.0458	.0172
-.32	.5953	1.6746	.0045	.0229	-.0261	.0194
-.28	.6076	1.6539	.0166	.0302	-.0060	.0218
-.24	.6203	1.6329	.0291	.0379	.0146	.0246
-.20	.6332	1.6114	.0421	.0460	.0357	.0276
-.16	.6463	1.5895	.0556	.0547	.0572	.0310
-.12	.6596	1.5674	.0696	.0638	.0793	.0347
-.08	.6730	1.5450	.0841	.0735	.1019	.0388
-.04	.6865	1.5226	.0992	.0837	.1251	.0434
.00	.7000	1.5000	.1149	.0946	.1488	.0484
.04	.7135	1.4774	.1312	.1061	.1730	.0539
.08	.7270	1.4550	.1481	.1183	.1978	.0600
.12	.7404	1.4326	.1657	.1312	.2232	.0666
.16	.7537	1.4105	.1839	.1448	.2491	.0739
.20	.7668	1.3886	.2029	.1592	.2757	.0818
.24	.7797	1.3671	.2226	.1745	.3028	.0905
.28	.7924	1.3461	.2430	.1905	.3304	.0998
.32	.8047	1.3254	.2641	.2074	.3587	.1099
.36	.8168	1.3053	.2860	.2252	.3875	.1208
.40	.8285	1.2858	.3087	.2438	.4169	.1325
.50	.8562	1.2397	.3689	.2945	.4929	.1657
.60	.8812	1.1981	.4340	.3511	.5722	.2044
.70	.9033	1.1611	.5041	.4137	.6548	.2490
.80	.9226	1.1289	.5788	.4819	.7403	.2994
.90	.9391	1.1015	.6579	.5556	.8285	.3554
1.00	.9528	1.0786	.7411	.6342	.9191	.4165
1.50	.9898	1.0169	1.1995	1.0814	1.3963	.7794
2.00	.9986	1.0023	1.6914	1.5711	1.8920	1.1881
2.24	.9995	1.0008	1.9307	1.8102	2.1316	1.3887

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.1958	.7654	.2009	.1577	.2729	.0810

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.5102	.1289	.2901

TABLE IV-B-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .20 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	2.0000	-1.2448	-.7469	-2.4896	.0000
-1.00	.6315	1.9214	-.2410	-.1420	-.4887	.0032
-.90	.6406	1.8985	-.2132	-.1243	-.4355	.0044
-.80	.6516	1.8711	-.1845	-.1058	-.3815	.0061
-.70	.6644	1.8389	-.1548	-.0862	-.3263	.0083
-.60	.6792	1.8019	-.1237	-.0653	-.2697	.0111
-.50	.6959	1.7603	-.0911	-.0429	-.2117	.0148
-.40	.7143	1.7142	-.0567	-.0186	-.1518	.0195
-.36	.7221	1.6947	-.0423	-.0083	-.1274	.0217
-.32	.7307	1.6746	-.0276	.0024	-.1026	.0242
-.28	.7384	1.6539	-.0125	.0134	-.0775	.0269
-.24	.7469	1.6329	.0030	.0249	-.0520	.0299
-.20	.7555	1.6114	.0189	.0369	-.0262	.0331
-.16	.7642	1.5895	.0353	.0494	.0001	.0367
-.12	.7730	1.5674	.0521	.0623	.0266	.0406
-.08	.7820	1.5450	.0694	.0758	.0536	.0448
-.04	.7910	1.5226	.0873	.0898	.0810	.0494
.00	.8000	1.5000	.1057	.1044	.1088	.0544
.04	.8090	1.4774	.1246	.1197	.1370	.0599
.08	.8180	1.4550	.1441	.1356	.1656	.0658
.12	.8270	1.4326	.1643	.1521	.1946	.0721
.16	.8358	1.4105	.1850	.1693	.2241	.0790
.20	.8445	1.3886	.2064	.1873	.2540	.0864
.24	.8531	1.3671	.2284	.2060	.2843	.0943
.28	.8616	1.3461	.2511	.2254	.3151	.1028
.32	.8698	1.3254	.2744	.2457	.3463	.1119
.36	.8779	1.3053	.2985	.2667	.3779	.1217
.40	.8857	1.2858	.3232	.2885	.4100	.1320
.50	.9041	1.2397	.3882	.3467	.4920	.1607
.60	.9208	1.1981	.4576	.4100	.5766	.1935
.70	.9356	1.1611	.5314	.4785	.6636	.2305
.80	.9484	1.1289	.6094	.5520	.7528	.2717
.90	.9594	1.1015	.6912	.6301	.8440	.3167
1.00	.9685	1.0786	.7765	.7123	.9370	.3653
1.50	.9932	1.0169	1.2406	1.1688	1.4201	.6472
2.00	.9991	1.0023	1.7336	1.6603	1.9169	.9598
2.16	.9995	1.0011	1.8931	1.8197	2.0767	1.0616

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.1573	.8352	.1836	.1682	.2221	.0785

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.4505	.1451	.1721

TABLE IV-C-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .40 PHI B = .00

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.0000	2.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	1.9214	.0077	.0003	.0151	.0000
-.90	.1015	1.8985	.0105	.0006	.0205	.0000
-.80	.1289	1.8711	.0142	.0010	.0274	.0001
-.70	.1611	1.8389	.0189	.0017	.0361	.0002
-.60	.1981	1.8019	.0248	.0028	.0469	.0004
-.50	.2397	1.7603	.0323	.0044	.0602	.0007
-.40	.2858	1.7142	.0415	.0068	.0762	.0014
-.36	.3053	1.6947	.0458	.0081	.0834	.0018
-.32	.3254	1.6746	.0504	.0095	.0912	.0022
-.28	.3461	1.6539	.0553	.0112	.0995	.0028
-.24	.3671	1.6329	.0607	.0131	.1083	.0035
-.20	.3886	1.6114	.0665	.0153	.1177	.0043
-.16	.4105	1.5895	.0727	.0178	.1277	.0053
-.12	.4326	1.5674	.0795	.0206	.1383	.0065
-.08	.4550	1.5450	.0867	.0238	.1495	.0079
-.04	.4774	1.5226	.0944	.0274	.1614	.0096
.00	.5000	1.5000	.1027	.0315	.1739	.0116
.04	.5226	1.4774	.1116	.0360	.1871	.0139
.08	.5450	1.4550	.1210	.0411	.2010	.0166
.12	.5674	1.4326	.1312	.0467	.2156	.0197
.16	.5895	1.4105	.1419	.0530	.2309	.0233
.20	.6114	1.3886	.1534	.0599	.2470	.0275
.24	.6329	1.3671	.1656	.0675	.2638	.0322
.28	.6539	1.3461	.1786	.0758	.2814	.0376
.32	.6746	1.3254	.1924	.0849	.2998	.0437
.36	.6947	1.3053	.2069	.0949	.3189	.0505
.40	.7142	1.2858	.2223	.1058	.3389	.0581
.50	.7603	1.2397	.2647	.1371	.3924	.0812
.60	.8019	1.1981	.3129	.1747	.4511	.1107
.70	.8389	1.1611	.3671	.2192	.5149	.1472
.80	.8711	1.1289	.4274	.2708	.5839	.1914
.90	.8985	1.1015	.4937	.3295	.6578	.2433
1.00	.9214	1.0786	.5657	.3951	.7363	.3031
1.50	.9831	1.0169	.9935	.8055	1.1814	.6970
2.00	.9977	1.0023	1.4786	1.2870	1.6702	1.1749
2.34	.9995	1.0005	1.8170	1.6250	2.0090	1.5125

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3190	.6741	.1920	.0847	.2993	.0435

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.7150	.0847	.6400

TABLE IV-C-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .40 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	2.0000	-.3024	-.0605	-.6048	.0000
-1.00	.2629	1.9214	-.0534	-.0092	-.1085	.0006
-.90	.2812	1.8985	-.0447	-.0069	-.0920	.0009
-.80	.3032	1.8711	-.0352	-.0041	-.0741	.0014
-.70	.3289	1.8389	-.0248	-.0008	-.0548	.0020
-.60	.3585	1.8019	-.0132	.0032	-.0336	.0029
-.50	.3918	1.7603	-.0001	.0081	-.0104	.0042
-.40	.4286	1.7142	.0146	.0141	.0152	.0061
-.36	.4443	1.6947	.0210	.0169	.0262	.0071
-.32	.4603	1.6746	.0278	.0200	.0376	.0082
-.28	.4768	1.6539	.0349	.0234	.0494	.0095
-.24	.4937	1.6329	.0425	.0270	.0618	.0109
-.20	.5109	1.6114	.0504	.0310	.0746	.0126
-.16	.5284	1.5895	.0587	.0353	.0880	.0145
-.12	.5461	1.5674	.0676	.0401	.1019	.0167
-.08	.5640	1.5450	.0769	.0452	.1164	.0192
-.04	.5820	1.5226	.0867	.0508	.1314	.0221
.00	.6000	1.5000	.0970	.0570	.1471	.0253
.04	.6180	1.4774	.1079	.0636	.1633	.0289
.08	.6360	1.4550	.1194	.0708	.1802	.0329
.12	.6539	1.4326	.1315	.0786	.1977	.0375
.16	.6716	1.4105	.1443	.0871	.2158	.0426
.20	.6891	1.3886	.1578	.0963	.2346	.0483
.24	.7063	1.3671	.1719	.1061	.2541	.0546
.28	.7232	1.3461	.1868	.1168	.2743	.0616
.32	.7397	1.3254	.2025	.1282	.2952	.0694
.36	.7557	1.3053	.2189	.1405	.3169	.0779
.40	.7714	1.2858	.2361	.1537	.3392	.0873
.50	.8082	1.2397	.2830	.1907	.3983	.1147
.60	.8415	1.1981	.3353	.2339	.4621	.1483
.70	.8711	1.1611	.3934	.2837	.5306	.1886
.80	.8968	1.1289	.4572	.3402	.6036	.2360
.90	.9188	1.1015	.5267	.4032	.6810	.2905
1.00	.9371	1.0786	.6014	.4726	.7625	.3519
1.50	.9864	1.0169	1.0368	.8938	1.2155	.7421
2.00	.9981	1.0023	1.5237	1.3777	1.7061	1.2036
2.30	.9995	1.0006	1.8223	1.6761	2.0051	1.4897

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.2693	.7187	.1828	.1139	.2689	.0597

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.6605	.0967	.4723

TABLE IV-C-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .40 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.4000	2.0000	-.6198	-.2479	-1.2397	.0000
-1.00	.4472	1.9214	-.1172	-.0448	-.2378	.0017
-.90	.4609	1.8985	-.1023	-.0381	-.2093	.0024
-.80	.4774	1.8711	-.0866	-.0307	-.1798	.0033
-.70	.4967	1.8389	-.0700	-.0226	-.1490	.0046
-.60	.5188	1.8019	-.0523	-.0136	-.1167	.0063
-.50	.5438	1.7603	-.0332	-.0035	-.0827	.0087
-.40	.5715	1.7142	-.0125	.0081	-.0467	.0118
-.36	.5832	1.6947	-.0036	.0132	-.0317	.0133
-.32	.5953	1.6746	.0055	.0186	-.0162	.0150
-.28	.6076	1.6539	.0150	.0243	-.0004	.0170
-.24	.6203	1.6329	.0249	.0303	.0158	.0191
-.20	.6332	1.6114	.0351	.0368	.0324	.0215
-.16	.6463	1.5895	.0458	.0436	.0495	.0242
-.12	.6596	1.5674	.0570	.0509	.0671	.0271
-.08	.6730	1.5450	.0686	.0586	.0852	.0304
-.04	.6865	1.5226	.0807	.0668	.1037	.0341
.00	.7000	1.5000	.0933	.0756	.1228	.0381
.04	.7135	1.4774	.1064	.0849	.1424	.0426
.08	.7270	1.4550	.1202	.0948	.1625	.0475
.12	.7404	1.4326	.1345	.1053	.1832	.0529
.16	.7537	1.4105	.1495	.1165	.2045	.0589
.20	.7668	1.3886	.1651	.1283	.2263	.0654
.24	.7797	1.3671	.1814	.1409	.2488	.0726
.28	.7924	1.3461	.1984	.1543	.2719	.0804
.32	.8047	1.3254	.2161	.1685	.2956	.0888
.36	.8168	1.3053	.2346	.1835	.3199	.0980
.40	.8285	1.2858	.2539	.1993	.3448	.1080
.50	.8562	1.2397	.3056	.2429	.4101	.1364
.60	.8812	1.1981	.3625	.2924	.4794	.1703
.70	.9033	1.1611	.4248	.3479	.5528	.2100
.80	.9226	1.1289	.4923	.4097	.6301	.2556
.90	.9391	1.1015	.5651	.4774	.7112	.3070
1.00	.9528	1.0786	.6427	.5508	.7958	.3641
1.50	.9898	1.0169	1.0859	.9832	1.2570	.7150
2.00	.9986	1.0023	1.5744	1.4695	1.7493	1.1209
2.24	.9995	1.0008	1.8134	1.7083	1.9886	1.3212

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.2250	.7749	.1752	.1362	.2403	.0698

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.6018	.1101	.3246

TABLE IV-C-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .40 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	2.0000	-.9698	-.5819	-1.9397	.0000
-1.00	.6315	1.9214	-.1874	-.1104	-.3799	.0025
-.90	.6406	1.8985	-.1656	-.0965	-.3383	.0035
-.80	.6516	1.8711	-.1430	-.0819	-.2957	.0048
-.70	.6644	1.8389	-.1196	-.0665	-.2522	.0065
-.60	.6792	1.8019	-.0950	-.0500	-.2075	.0087
-.50	.6959	1.7603	-.0691	-.0322	-.1613	.0116
-.40	.7143	1.7142	-.0416	-.0128	-.1136	.0154
-.36	.7221	1.6947	-.0301	-.0045	-.0940	.0172
-.32	.7302	1.6746	-.0182	.0041	-.0740	.0192
-.28	.7384	1.6539	-.0061	.0130	-.0538	.0214
-.24	.7469	1.6329	.0064	.0223	-.0332	.0238
-.20	.7555	1.6114	.0194	.0320	-.0123	.0264
-.16	.7642	1.5895	.0327	.0421	.0091	.0293
-.12	.7730	1.5674	.0464	.0527	.0308	.0325
-.08	.7820	1.5450	.0606	.0637	.0528	.0359
-.04	.7910	1.5226	.0753	.0753	.0754	.0397
.00	.8000	1.5000	.0905	.0873	.0983	.0439
.04	.8090	1.4774	.1062	.1000	.1217	.0484
.08	.8180	1.4550	.1224	.1132	.1455	.0533
.12	.8270	1.4326	.1392	.1270	.1698	.0586
.16	.8358	1.4105	.1567	.1415	.1946	.0644
.20	.8445	1.3886	.1747	.1567	.2198	.0706
.24	.8531	1.3671	.1934	.1726	.2456	.0774
.28	.8616	1.3461	.2128	.1892	.2718	.0847
.32	.8698	1.3254	.2329	.2065	.2986	.0925
.36	.8779	1.3053	.2536	.2247	.3260	.1009
.40	.8857	1.2858	.2751	.2436	.3538	.1098
.50	.9041	1.2397	.3322	.2947	.4258	.1350
.60	.9208	1.1981	.3940	.3512	.5012	.1643
.70	.9356	1.1611	.4608	.4132	.5799	.1978
.80	.9484	1.1289	.5324	.4806	.6618	.2356
.90	.9594	1.1015	.6087	.5534	.7469	.2776
1.00	.9685	1.0786	.6893	.6311	.8347	.3235
1.50	.9932	1.0169	1.1404	1.0749	1.3043	.5976
2.00	.9991	1.0023	1.6307	1.5637	1.7983	.9084
2.16	.9995	1.0011	1.7900	1.7229	1.9579	1.0101

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.1849	.8413	.1678	.1509	.2102	.0682

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.5378	.1255	.1965

TABLE IV-D-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .60 PHI B = .00

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.0000	2.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	1.9214	.0051	.0002	.0101	.0000
-.90	.1015	1.8985	.0070	.0004	.0137	.0000
-.80	.1289	1.8711	.0095	.0007	.0183	.0001
-.70	.1611	1.8389	.0126	.0011	.0241	.0001
-.60	.1981	1.8019	.0166	.0018	.0313	.0003
-.50	.2397	1.7603	.0216	.0029	.0402	.0005
-.40	.2858	1.7142	.0278	.0046	.0510	.0009
-.36	.3053	1.6947	.0306	.0054	.0559	.0012
-.32	.3254	1.6746	.0337	.0064	.0611	.0015
-.28	.3461	1.6539	.0371	.0075	.0667	.0019
-.24	.3671	1.6329	.0408	.0088	.0727	.0023
-.20	.3886	1.6114	.0447	.0103	.0791	.0029
-.16	.4105	1.5895	.0489	.0120	.0859	.0036
-.12	.4326	1.5674	.0535	.0139	.0931	.0044
-.08	.4550	1.5450	.0585	.0161	.1008	.0054
-.04	.4774	1.5226	.0638	.0186	.1089	.0065
.00	.5000	1.5000	.0695	.0214	.1176	.0079
.04	.5226	1.4774	.0756	.0246	.1267	.0095
.08	.5450	1.4550	.0822	.0281	.1364	.0114
.12	.5674	1.4326	.0893	.0320	.1466	.0136
.16	.5895	1.4105	.0969	.0364	.1574	.0161
.20	.6114	1.3886	.1050	.0413	.1687	.0190
.24	.6329	1.3671	.1137	.0467	.1807	.0224
.28	.6539	1.3461	.1230	.0527	.1933	.0263
.32	.6746	1.3254	.1329	.0593	.2066	.0306
.36	.6947	1.3053	.1435	.0665	.2205	.0356
.40	.7142	1.2858	.1548	.0745	.2352	.0412
.50	.7603	1.2397	.1864	.0978	.2750	.0584
.60	.8019	1.1981	.2231	.1265	.3197	.0809
.70	.8389	1.1611	.2655	.1614	.3697	.1095
.80	.8711	1.1289	.3141	.2029	.4253	.1451
.90	.8985	1.1015	.3691	.2516	.4865	.1882
1.00	.9214	1.0786	.4305	.3075	.5535	.2391
1.50	.9831	1.0169	.8243	.6855	.9630	.6021
2.00	.9977	1.0023	1.3008	1.1584	1.4431	1.0715
2.34	.9995	1.0005	1.6382	1.4954	1.7809	1.4081

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3570	.6932	.1427	.0660	.2195	.0352

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.8446	.0660	.7136

TABLE IV-D-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .60 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	2.0000	-.2024	-.0405	-.4049	.0000
-1.00	.2629	1.9214	-.0357	-.0062	-.0726	.0004
-.90	.2812	1.8985	-.0298	-.0046	-.0614	.0006
-.80	.3032	1.8711	-.0235	-.0027	-.0494	.0009
-.70	.3289	1.8389	-.0164	-.0005	-.0364	.0013
-.60	.3585	1.8019	-.0086	.0022	-.0221	.0019
-.50	.3918	1.7603	.0002	.0055	-.0063	.0028
-.40	.4286	1.7142	.0103	.0096	.0111	.0041
-.36	.4443	1.6947	.0147	.0116	.0186	.0048
-.32	.4603	1.6746	.0193	.0137	.0264	.0056
-.28	.4768	1.6539	.0242	.0159	.0345	.0064
-.24	.4937	1.6329	.0294	.0185	.0430	.0074
-.20	.5109	1.6114	.0348	.0212	.0519	.0086
-.16	.5284	1.5895	.0406	.0242	.0611	.0099
-.12	.5461	1.5674	.0467	.0275	.0708	.0115
-.08	.5640	1.5450	.0532	.0311	.0808	.0132
-.04	.5820	1.5226	.0601	.0350	.0914	.0152
.00	.6000	1.5000	.0673	.0393	.1023	.0174
.04	.6180	1.4774	.0750	.0440	.1138	.0200
.08	.6360	1.4550	.0832	.0491	.1258	.0229
.12	.6539	1.4326	.0918	.0547	.1382	.0261
.16	.6716	1.4105	.1010	.0608	.1513	.0298
.20	.6891	1.3886	.1107	.0674	.1648	.0339
.24	.7063	1.3671	.1210	.0745	.1790	.0385
.28	.7232	1.3461	.1319	.0823	.1938	.0436
.32	.7397	1.3254	.1434	.0908	.2092	.0493
.36	.7557	1.3053	.1556	.0999	.2253	.0557
.40	.7714	1.2858	.1685	.1098	.2420	.0627
.50	.8082	1.2397	.2042	.1379	.2870	.0835
.60	.8415	1.1981	.2450	.1716	.3367	.1097
.70	.8711	1.1611	.2914	.2114	.3914	.1419
.80	.8968	1.1289	.3438	.2578	.4514	.1809
.90	.9188	1.1015	.4024	.3110	.5167	.2269
1.00	.9371	1.0786	.4673	.3713	.5874	.2802
1.50	.9864	1.0169	.8718	.7628	1.0081	.6430
2.00	.9981	1.0023	1.3511	1.2391	1.4910	1.0973
2.30	.9995	1.0006	1.6489	1.5366	1.7892	1.3827

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3094	.7353	.1403	.0885	.2051	.0478

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.7914	.0755	.5349

TABLE IV-D-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .60 PHI B = .40

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.4000	2.0000	-.4202	-.1681	-.8403	.0000
-1.00	.4472	1.9214	-.0793	-.0303	-.1609	.0011
-.90	.4609	1.8985	-.0691	-.0257	-.1415	.0016
-.80	.4774	1.8711	-.0584	-.0207	-.1213	.0023
-.70	.4967	1.8389	-.0471	-.0152	-.1002	.0031
-.60	.5188	1.8019	-.0349	-.0090	-.0780	.0043
-.50	.5438	1.7603	-.0217	-.0020	-.0546	.0059
-.40	.5715	1.7142	-.0073	.0060	-.0296	.0081
-.36	.5832	1.6947	-.0012	.0096	-.0191	.0092
-.32	.5953	1.6746	.0052	.0134	-.0084	.0104
-.28	.6076	1.6539	.0119	.0174	.0027	.0117
-.24	.6203	1.6329	.0188	.0216	.0141	.0132
-.20	.6332	1.6114	.0260	.0261	.0258	.0149
-.16	.6463	1.5895	.0336	.0310	.0379	.0168
-.12	.6596	1.5674	.0415	.0361	.0504	.0189
-.08	.6730	1.5450	.0498	.0416	.0633	.0212
-.04	.6865	1.5226	.0584	.0475	.0765	.0239
.00	.7000	1.5000	.0675	.0538	.0902	.0268
.04	.7135	1.4774	.0770	.0605	.1044	.0300
.08	.7270	1.4550	.0870	.0677	.1190	.0336
.12	.7404	1.4326	.0974	.0754	.1342	.0375
.16	.7537	1.4105	.1085	.0836	.1498	.0419
.20	.7668	1.3886	.1200	.0924	.1660	.0468
.24	.7797	1.3671	.1322	.1018	.1827	.0521
.28	.7924	1.3461	.1449	.1119	.2000	.0579
.32	.8047	1.3254	.1583	.1226	.2179	.0643
.36	.8168	1.3053	.1724	.1340	.2364	.0713
.40	.8285	1.2858	.1872	.1462	.2556	.0790
.50	.8562	1.2397	.2275	.1802	.3065	.1012
.60	.8812	1.1981	.2730	.2197	.3619	.1282
.70	.9033	1.1611	.3239	.2651	.4219	.1607
.80	.9226	1.1289	.3807	.3170	.4869	.1990
.90	.9391	1.1015	.4433	.3753	.5567	.2433
1.00	.9528	1.0786	.5119	.4402	.6314	.2937
1.50	.9898	1.0169	.9277	.8459	1.0640	.6231
2.00	.9986	1.0023	1.4097	1.3258	1.5497	1.0237
2.24	.9995	1.0008	1.6481	1.5639	1.7883	1.2235

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.2656	.7878	.1403	.1082	.1937	.0558

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.7322	.0868	.3748

TABLE IV-D-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .60 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	2.0000	-.6726	-.4036	-1.3453	.0000
-1.00	.6315	1.9214	-.1297	-.0764	-.2629	.0017
-.90	.6406	1.8985	-.1144	-.0667	-.2338	.0024
-.80	.6516	1.8711	-.0986	-.0565	-.2040	.0033
-.70	.6644	1.8389	-.0821	-.0456	-.1734	.0045
-.60	.6792	1.8019	-.0648	-.0340	-.1419	.0061
-.50	.6959	1.7603	-.0464	-.0213	-.1091	.0082
-.40	.7143	1.7142	-.0268	-.0075	-.0751	.0109
-.36	.7221	1.6947	-.0186	-.0016	-.0611	.0122
-.32	.7302	1.6746	-.0101	.0046	-.0468	.0136
-.28	.7384	1.6539	-.0013	.0110	-.0322	.0151
-.24	.7469	1.6329	.0077	.0177	-.0173	.0169
-.20	.7555	1.6114	.0171	.0248	-.0021	.0188
-.16	.7642	1.5895	.0268	.0321	.0134	.0209
-.12	.7730	1.5674	.0368	.0398	.0293	.0232
-.08	.7820	1.5450	.0472	.0479	.0455	.0258
-.04	.7910	1.5226	.0581	.0565	.0621	.0286
.00	.8000	1.5000	.0693	.0654	.0791	.0316
.04	.8090	1.4774	.0810	.0748	.0965	.0350
.08	.8180	1.4550	.0932	.0847	.1144	.0387
.12	.8270	1.4326	.1059	.0952	.1327	.0427
.16	.8358	1.4105	.1191	.1061	.1515	.0471
.20	.8445	1.3886	.1329	.1177	.1707	.0518
.24	.8531	1.3671	.1472	.1299	.1905	.0570
.28	.8616	1.3461	.1622	.1428	.2109	.0626
.32	.8698	1.3254	.1779	.1563	.2317	.0687
.36	.8779	1.3053	.1942	.1706	.2532	.0753
.40	.8857	1.2858	.2112	.1856	.2752	.0824
.50	.9041	1.2397	.2570	.2266	.3331	.1027
.60	.9208	1.1981	.3078	.2730	.3950	.1267
.70	.9356	1.1611	.3640	.3251	.4612	.1549
.80	.9484	1.1289	.4256	.3831	.5317	.1874
.90	.9594	1.1015	.4927	.4472	.6065	.2243
1.00	.9685	1.0786	.5652	.5171	.6855	.2657
1.50	.9932	1.0169	.9930	.9379	1.1306	.5257
2.00	.9991	1.0023	1.4778	1.4213	1.6191	.8331
2.16	.9995	1.0011	1.6367	1.5801	1.7783	.9345

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.2243	.8498	.1416	.1251	.1827	.0549

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.6648	.1004	.2324

TABLE IV-E-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .80 PHI B = .00

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.0000	2.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	1.9214	.0026	.0001	.0050	.0000
-.90	.1015	1.8985	.0035	.0002	.0068	.0000
-.80	.1289	1.8711	.0047	.0003	.0091	.0000
-.70	.1611	1.8389	.0063	.0006	.0121	.0001
-.60	.1981	1.8019	.0083	.0009	.0157	.0001
-.50	.2397	1.7603	.0108	.0015	.0202	.0002
-.40	.2858	1.7142	.0139	.0023	.0256	.0005
-.36	.3053	1.6947	.0154	.0027	.0281	.0006
-.32	.3254	1.6746	.0170	.0032	.0307	.0007
-.28	.3461	1.6539	.0187	.0038	.0335	.0009
-.24	.3671	1.6329	.0205	.0045	.0366	.0012
-.20	.3886	1.6114	.0225	.0052	.0398	.0015
-.16	.4105	1.5895	.0247	.0061	.0433	.0018
-.12	.4326	1.5674	.0270	.0071	.0470	.0022
-.08	.4550	1.5450	.0296	.0082	.0510	.0027
-.04	.4774	1.5226	.0323	.0095	.0552	.0033
.00	.5000	1.5000	.0353	.0109	.0597	.0040
.04	.5226	1.4774	.0385	.0126	.0644	.0049
.08	.5450	1.4550	.0419	.0144	.0695	.0059
.12	.5674	1.4326	.0457	.0165	.0748	.0070
.16	.5895	1.4105	.0497	.0188	.0805	.0084
.20	.6114	1.3886	.0540	.0214	.0866	.0099
.24	.6329	1.3671	.0587	.0243	.0930	.0117
.28	.6539	1.3461	.0637	.0275	.0998	.0138
.32	.6746	1.3254	.0691	.0311	.1071	.0162
.36	.6947	1.3053	.0749	.0351	.1147	.0189
.40	.7142	1.2858	.0812	.0395	.1228	.0220
.50	.7603	1.2397	.0991	.0527	.1454	.0318
.60	.8019	1.1981	.1205	.0695	.1715	.0449
.70	.8389	1.1611	.1462	.0906	.2018	.0623
.80	.8711	1.1289	.1769	.1169	.2369	.0847
.90	.8985	1.1015	.2132	.1490	.2774	.1132
1.00	.9214	1.0786	.2560	.1880	.3240	.1487
1.50	.9831	1.0169	.5759	.4955	.6563	.4443
2.00	.9977	1.0023	1.0285	.9447	1.1123	.8902
2.34	.9995	1.0005	1.3630	1.2788	1.4471	1.2239

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.4180	.7228	.0842	.0417	.1267	.0236

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
1.0612	.0417	.8418

TABLE IV-E-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA = 2.00 C_A^2 = .80 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	2.0000	-.1016	-.0203	-.2033	.0000
-1.00	.2629	1.9214	-.0179	-.0031	-.0364	.0002
-.90	.2812	1.8985	-.0149	-.0023	-.0308	.0003
-.80	.3022	1.8711	-.0117	-.0013	-.0247	.0005
-.70	.3289	1.8389	-.0082	-.0002	-.0181	.0007
-.60	.3585	1.8019	-.0042	.0011	-.0109	.0010
-.50	.3918	1.7603	.0003	.0028	-.0029	.0014
-.40	.4286	1.7142	.0054	.0049	.0060	.0021
-.36	.4443	1.6947	.0077	.0059	.0099	.0024
-.32	.4603	1.6746	.0100	.0070	.0139	.0028
-.28	.4768	1.6539	.0126	.0082	.0181	.0033
-.24	.4937	1.6329	.0152	.0095	.0224	.0038
-.20	.5109	1.6114	.0181	.0109	.0270	.0044
-.16	.5284	1.5895	.0211	.0124	.0318	.0051
-.12	.5461	1.5674	.0243	.0142	.0369	.0059
-.08	.5640	1.5450	.0276	.0160	.0421	.0068
-.04	.5820	1.5226	.0313	.0181	.0477	.0078
.00	.6000	1.5000	.0351	.0204	.0535	.0090
.04	.6180	1.4774	.0392	.0229	.0596	.0104
.08	.6360	1.4550	.0435	.0256	.0660	.0119
.12	.6539	1.4326	.0482	.0286	.0727	.0137
.16	.6716	1.4105	.0531	.0319	.0797	.0156
.20	.6891	1.3886	.0584	.0355	.0871	.0179
.24	.7063	1.3671	.0641	.0394	.0949	.0204
.28	.7232	1.3461	.0701	.0437	.1031	.0233
.32	.7397	1.3254	.0766	.0485	.1117	.0264
.36	.7557	1.3053	.0835	.0536	.1208	.0300
.40	.7714	1.2858	.0908	.0592	.1303	.0340
.50	.8082	1.2397	.1116	.0756	.1565	.0462
.60	.8415	1.1981	.1361	.0959	.1864	.0619
.70	.8711	1.1611	.1651	.1208	.2205	.0821
.80	.8968	1.1289	.1993	.1510	.2596	.1074
.90	.9188	1.1015	.2392	.1873	.3042	.1388
1.00	.9371	1.0786	.2857	.2304	.3548	.1770
1.50	.9864	1.0169	.6211	.5553	.7033	.4784
2.00	.9981	1.0023	1.0792	1.0107	1.1648	.9127
2.30	.9995	1.0006	1.3746	1.3058	1.4606	1.1957

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3740	.7612	.0860	.0555	.1241	.0314

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.0114	.0479	.6439

TABLE IV-E-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA = 2.00 C_A^2 = .80 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.4000	2.0000	-.2137	-.0855	-.4274	.0000
-1.00	.4472	1.9214	-.0402	-.0154	-.0817	.0006
-.90	.4609	1.8985	-.0350	-.0130	-.0717	.0008
-.80	.4774	1.8711	-.0296	-.0105	-.0614	.0012
-.70	.4967	1.8389	-.0237	-.0076	-.0505	.0016
-.60	.5188	1.8019	-.0174	-.0044	-.0391	.0022
-.50	.5438	1.7603	-.0106	-.0008	-.0269	.0031
-.40	.5715	1.7142	-.0031	.0034	-.0139	.0042
-.36	.5832	1.6947	.0001	.0052	-.0084	.0047
-.32	.5953	1.6746	.0035	.0072	-.0028	.0054
-.28	.6076	1.6539	.0070	.0093	.0030	.0061
-.24	.6203	1.6329	.0106	.0116	.0090	.0069
-.20	.6332	1.6114	.0145	.0140	.0153	.0078
-.16	.6463	1.5895	.0185	.0165	.0217	.0088
-.12	.6596	1.5674	.0227	.0193	.0284	.0099
-.08	.6730	1.5450	.0271	.0223	.0353	.0112
-.04	.6865	1.5226	.0318	.0254	.0424	.0126
.00	.7000	1.5000	.0367	.0289	.0499	.0141
.04	.7135	1.4774	.0419	.0325	.0576	.0159
.08	.7270	1.4550	.0474	.0365	.0656	.0179
.12	.7404	1.4326	.0532	.0407	.0740	.0201
.16	.7537	1.4105	.0593	.0453	.0827	.0225
.20	.7668	1.3886	.0658	.0502	.0918	.0252
.24	.7797	1.3671	.0727	.0556	.1013	.0282
.28	.7924	1.3461	.0800	.0613	.1112	.0316
.32	.8047	1.3254	.0877	.0675	.1215	.0353
.36	.8168	1.3053	.0960	.0741	.1323	.0394
.40	.8285	1.2858	.1047	.0813	.1436	.0439
.50	.8562	1.2397	.1290	.1018	.1743	.0573
.60	.8812	1.1981	.1573	.1264	.2088	.0741
.70	.9033	1.1611	.1903	.1559	.2477	.0952
.80	.9226	1.1289	.2286	.1909	.2915	.1210
.90	.9391	1.1015	.2729	.2321	.3409	.1523
1.00	.9528	1.0786	.3236	.2801	.3961	.1896
1.50	.9898	1.0169	.6761	.6243	.7625	.4693
2.00	.9986	1.0023	1.1399	1.0859	1.2297	.8547
2.24	.9995	1.0008	1.3763	1.3222	1.4665	1.0529

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3321	.8084	.0902	.0695	.1247	.0365

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.9538	.0556	.4626

TABLE IV-B-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA = 2.00 C_A^2 = .80 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	2.0000	-.3505	-.2103	-.7009	.0000
-1.00	.6315	1.9214	-.0674	-.0397	-.1367	.0009
-.90	.6406	1.8985	-.0594	-.0346	-.1214	.0013
-.80	.6516	1.8711	-.0511	-.0292	-.1057	.0017
-.70	.6644	1.8389	-.0423	-.0235	-.0895	.0024
-.60	.6792	1.8019	-.0331	-.0173	-.0727	.0032
-.50	.6959	1.7603	-.0233	-.0106	-.0553	.0043
-.40	.7143	1.7142	-.0128	-.0031	-.0370	.0058
-.36	.7221	1.6947	-.0084	.0001	-.0294	.0065
-.32	.7302	1.6746	-.0038	.0034	-.0217	.0072
-.28	.7384	1.6539	.0010	.0069	-.0137	.0081
-.24	.7469	1.6329	.0060	.0106	-.0056	.0090
-.20	.7555	1.6114	.0111	.0144	.0027	.0101
-.16	.7642	1.5895	.0164	.0185	.0113	.0112
-.12	.7730	1.5674	.0220	.0228	.0200	.0125
-.08	.7820	1.5450	.0278	.0273	.0291	.0139
-.04	.7910	1.5226	.0338	.0320	.0384	.0155
.00	.8000	1.5000	.0402	.0371	.0479	.0172
.04	.8090	1.4774	.0468	.0424	.0578	.0191
.08	.8180	1.4550	.0538	.0481	.0680	.0212
.12	.8270	1.4326	.0610	.0541	.0785	.0236
.16	.8358	1.4105	.0687	.0604	.0894	.0261
.20	.8445	1.3886	.0768	.0672	.1007	.0289
.24	.8531	1.3671	.0852	.0744	.1124	.0319
.28	.8616	1.3461	.0942	.0820	.1245	.0353
.32	.8698	1.3254	.1036	.0902	.1370	.0390
.36	.8779	1.3053	.1135	.0989	.1501	.0430
.40	.8857	1.2858	.1240	.1081	.1637	.0473
.50	.9041	1.2397	.1528	.1339	.2001	.0601
.60	.9208	1.1981	.1859	.1641	.2404	.0757
.70	.9356	1.1611	.2239	.1994	.2851	.0948
.80	.9484	1.1289	.2673	.2403	.3348	.1177
.90	.9594	1.1015	.3167	.2875	.3899	.1449
1.00	.9685	1.0786	.3725	.3412	.4506	.1767
1.50	.9932	1.0169	.7438	.7067	.8367	.4027
2.00	.9991	1.0023	1.2134	1.1748	1.3098	.7004
2.16	.9995	1.0011	1.3711	1.3325	1.4678	.8011

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.2908	.8638	.0567	.0842	.1278	.0363

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.8855	.0655	.2962

TABLE IV-F-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .90 PHI B = .00

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.0000	2.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	1.9214	.0013	.0001	.0025	.0000
-.90	.1015	1.8985	.0018	.0001	.0034	.0000
-.80	.1289	1.8711	.0024	.0002	.0046	.0000
-.70	.1611	1.8389	.0032	.0003	.0060	.0000
-.60	.1981	1.8019	.0042	.0005	.0079	.0001
-.50	.2397	1.7603	.0054	.0007	.0101	.0001
-.40	.2858	1.7142	.0070	.0012	.0128	.0002
-.36	.3053	1.6947	.0077	.0014	.0141	.0003
-.32	.3254	1.6746	.0085	.0016	.0154	.0004
-.28	.3461	1.6539	.0094	.0019	.0168	.0005
-.24	.3671	1.6329	.0103	.0022	.0184	.0006
-.20	.3886	1.6114	.0113	.0026	.0200	.0007
-.16	.4105	1.5895	.0124	.0031	.0218	.0009
-.12	.4326	1.5674	.0136	.0036	.0236	.0011
-.08	.4550	1.5450	.0149	.0041	.0256	.0014
-.04	.4774	1.5226	.0163	.0048	.0278	.0017
.00	.5000	1.5000	.0178	.0055	.0300	.0020
.04	.5226	1.4774	.0194	.0064	.0325	.0025
.08	.5450	1.4550	.0212	.0073	.0351	.0030
.12	.5674	1.4326	.0231	.0084	.0378	.0036
.16	.5895	1.4105	.0252	.0096	.0408	.0043
.20	.6114	1.3886	.0274	.0109	.0439	.0051
.24	.6329	1.3671	.0298	.0124	.0472	.0060
.28	.6539	1.3461	.0324	.0141	.0508	.0071
.32	.6746	1.3254	.0353	.0160	.0546	.0083
.36	.6947	1.3053	.0383	.0181	.0586	.0098
.40	.7142	1.2858	.0417	.0204	.0629	.0114
.50	.7603	1.2397	.0512	.0275	.0750	.0166
.60	.8019	1.1981	.0629	.0366	.0892	.0238
.70	.8389	1.1611	.0773	.0485	.1062	.0335
.80	.8711	1.1289	.0950	.0636	.1264	.0465
.90	.8985	1.1015	.1166	.0828	.1505	.0635
1.00	.9214	1.0786	.1432	.1069	.1794	.0855
1.50	.9831	1.0169	.3785	.3334	.4236	.3035
2.00	.9977	1.0023	.7912	.7431	.8392	.7102
2.34	.9995	1.0005	1.1199	1.0715	1.1684	1.0382

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.4732	.7483	.0485	.0254	.0715	.0151

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
1.2685	.0254	.9694

TABLE IV-F-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .90 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	2.0000	-.0509	-.0102	-.1018	.0000
-1.00	.2629	1.9214	-.0090	-.0015	-.0182	.0001
-.90	.2812	1.8985	-.0075	-.0011	-.0154	.0002
-.80	.3032	1.8711	-.0059	-.0007	-.0124	.0002
-.70	.3289	1.8389	-.0041	-.0001	-.0090	.0003
-.60	.3585	1.8019	-.0021	.0006	-.0054	.0005
-.50	.3918	1.7603	.0002	.0014	-.0014	.0007
-.40	.4286	1.7142	.0028	.0025	.0031	.0011
-.36	.4443	1.6947	.0039	.0030	.0051	.0012
-.32	.4603	1.6746	.0051	.0035	.0071	.0014
-.28	.4768	1.6539	.0064	.0041	.0092	.0017
-.24	.4937	1.6329	.0078	.0048	.0115	.0019
-.20	.5109	1.6114	.0092	.0055	.0138	.0022
-.16	.5284	1.5895	.0107	.0063	.0163	.0026
-.12	.5461	1.5674	.0124	.0072	.0188	.0030
-.08	.5640	1.5450	.0141	.0082	.0215	.0035
-.04	.5820	1.5226	.0159	.0092	.0244	.0040
.00	.6000	1.5000	.0179	.0104	.0274	.0046
.04	.6180	1.4774	.0200	.0117	.0305	.0053
.08	.6360	1.4550	.0223	.0131	.0338	.0061
.12	.6539	1.4326	.0247	.0146	.0373	.0070
.16	.6716	1.4105	.0273	.0164	.0410	.0080
.20	.6891	1.3886	.0301	.0182	.0448	.0092
.24	.7063	1.3671	.0330	.0203	.0489	.0105
.28	.7232	1.3461	.0362	.0226	.0533	.0120
.32	.7397	1.3254	.0396	.0251	.0578	.0137
.36	.7557	1.3053	.0433	.0279	.0627	.0156
.40	.7714	1.2858	.0473	.0309	.0678	.0178
.50	.8082	1.2397	.0586	.0398	.0821	.0244
.60	.8415	1.1981	.0723	.0511	.0987	.0332
.70	.8711	1.1611	.0888	.0653	.1182	.0447
.80	.8968	1.1289	.1089	.0831	.1412	.0596
.90	.9188	1.1015	.1334	.1053	.1685	.0788
1.00	.9371	1.0786	.1630	.1328	.2007	.1032
1.50	.9864	1.0169	.4156	.3778	.4629	.3307
2.00	.9981	1.0023	.8376	.7973	.8880	.7309
2.30	.9995	1.0006	1.1284	1.0878	1.1791	1.0094

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.4325	.7837	.0508	.0336	.0722	.0198

ETA M	(SIGMA)X(STANTON NO.)	$(SIGMA)X(V_B/U_A)$
1.2224	.0293	.7523

TABLE IV-F-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .90 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.4000	2.0000	-.1078	-.0431	-.2155	.0000
-1.00	.4472	1.9214	-.0203	-.0078	-.0411	.0003
-.90	.4609	1.8985	-.0176	-.0066	-.0361	.0004
-.80	.4774	1.8711	-.0149	-.0053	-.0309	.0006
-.70	.4967	1.8389	-.0119	-.0038	-.0254	.0008
-.60	.5188	1.8019	-.0087	-.0022	-.0196	.0011
-.50	.5438	1.7603	-.0052	-.0003	-.0134	.0016
-.40	.5715	1.7142	-.0014	.0018	-.0067	.0021
-.36	.5832	1.6947	.0002	.0027	-.0039	.0024
-.32	.5953	1.6746	.0020	.0038	-.0010	.0027
-.28	.6076	1.6539	.0038	.0048	.0020	.0031
-.24	.6203	1.6329	.0056	.0060	.0051	.0035
-.20	.6332	1.6114	.0076	.0072	.0083	.0040
-.16	.6463	1.5895	.0097	.0086	.0116	.0045
-.12	.6596	1.5674	.0119	.0100	.0150	.0051
-.08	.6730	1.5450	.0142	.0115	.0186	.0057
-.04	.6865	1.5226	.0166	.0132	.0224	.0065
.00	.7000	1.5000	.0192	.0150	.0262	.0073
.04	.7135	1.4774	.0219	.0169	.0303	.0082
.08	.7270	1.4550	.0248	.0190	.0345	.0092
.12	.7404	1.4326	.0279	.0212	.0389	.0104
.16	.7537	1.4105	.0311	.0236	.0436	.0117
.20	.7668	1.3886	.0346	.0263	.0484	.0131
.24	.7797	1.3671	.0383	.0291	.0535	.0148
.28	.7924	1.3461	.0422	.0322	.0588	.0166
.32	.8047	1.3254	.0464	.0356	.0644	.0186
.36	.8168	1.3053	.0509	.0392	.0703	.0208
.40	.8285	1.2858	.0557	.0431	.0765	.0233
.50	.8562	1.2397	.0692	.0546	.0936	.0307
.60	.8812	1.1981	.0854	.0686	.1133	.0404
.70	.9033	1.1611	.1047	.0859	.1361	.0527
.80	.9226	1.1289	.1280	.1071	.1627	.0684
.90	.9391	1.1015	.1559	.1331	.1938	.0881
1.00	.9528	1.0786	.1893	.1647	.2302	.1127
1.50	.9898	1.0169	.4619	.4311	.5132	.3294
2.00	.9986	1.0023	.8938	.8611	.9483	.6884
2.24	.9995	1.0008	1.1267	1.0938	1.1815	.8836

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3931	.8265	.0548	.0424	.0754	.0228

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
1.1681	.0342	.5501

TABLE IV-F-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA = 2.00 C_A^2 = .90 PHI B = .60

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.6000	2.0000	-.1790	-.1074	-.3580	.0000
-1.00	.6315	1.9214	-.0344	-.0202	-.0697	.0005
-.90	.6406	1.8985	-.0303	-.0176	-.0619	.0007
-.80	.6516	1.8711	-.0260	-.0149	-.0538	.0009
-.70	.6644	1.8389	-.0215	-.0119	-.0455	.0012
-.60	.6792	1.8019	-.0167	-.0087	-.0368	.0017
-.50	.6959	1.7603	-.0117	-.0052	-.0278	.0022
-.40	.7143	1.7142	-.0062	-.0014	-.0183	.0030
-.36	.7221	1.6947	-.0039	.0003	-.0143	.0033
-.32	.7302	1.6746	-.0015	.0020	-.0103	.0037
-.28	.7384	1.6539	.0010	.0039	-.0062	.0042
-.24	.7469	1.6329	.0036	.0058	-.0019	.0047
-.20	.7555	1.6114	.0063	.0078	.0025	.0052
-.16	.7642	1.5895	.0091	.0099	.0070	.0058
-.12	.7730	1.5674	.0120	.0122	.0116	.0065
-.08	.7820	1.5450	.0151	.0146	.0164	.0073
-.04	.7910	1.5226	.0183	.0171	.0213	.0081
.00	.8000	1.5000	.0217	.0198	.0264	.0090
.04	.8090	1.4774	.0253	.0227	.0317	.0101
.08	.8180	1.4550	.0290	.0257	.0372	.0112
.12	.8270	1.4326	.0329	.0290	.0429	.0124
.16	.8358	1.4105	.0371	.0324	.0488	.0138
.20	.8445	1.3886	.0415	.0361	.0550	.0153
.24	.8531	1.3671	.0462	.0401	.0614	.0170
.28	.8616	1.3461	.0511	.0443	.0681	.0189
.32	.8698	1.3254	.0563	.0488	.0751	.0209
.36	.8779	1.3053	.0619	.0537	.0824	.0231
.40	.8857	1.2858	.0678	.0589	.0901	.0256
.50	.9041	1.2397	.0844	.0738	.1110	.0329
.60	.9208	1.1981	.1039	.0916	.1347	.0422
.70	.9356	1.1611	.1269	.1130	.1619	.0537
.80	.9484	1.1289	.1543	.1387	.1932	.0682
.90	.9594	1.1015	.1866	.1696	.2292	.0860
1.00	.9685	1.0786	.2248	.2064	.2708	.1077
1.50	.9932	1.0169	.5209	.4980	.5784	.2882
2.00	.9991	1.0023	.9633	.9390	1.0239	.5687
2.16	.9995	1.0011	1.1187	1.0943	1.1796	.6680

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.3533	.8765	.0609	.0529	.0812	.0228

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.1023	.0407	.3601

TABLE V-A-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .CO PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.CO	.0000	10.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	9.2922	.0026	.0001	.0251	.0000
-.90	.1015	9.0861	.0036	.0002	.0341	.0000
-.80	.1289	8.8395	.0049	.0003	.0456	.0000
-.70	.1611	8.5502	.0065	.0006	.0601	.0001
-.60	.1981	8.2174	.0087	.0010	.0780	.0001
-.50	.2397	7.8423	.0114	.0016	.0998	.0003
-.40	.2858	7.4278	.0148	.0025	.1261	.0005
-.36	.3053	7.2520	.0164	.0030	.1379	.0006
-.32	.3254	7.0711	.0182	.0035	.1505	.0008
-.28	.3461	6.8855	.0201	.0042	.1639	.0010
-.24	.3671	6.6957	.0222	.0049	.1782	.0013
-.20	.3886	6.5022	.0245	.0058	.1933	.0016
-.16	.4105	6.3056	.0270	.0068	.2093	.0020
-.12	.4326	6.1064	.0297	.0079	.2262	.0025
-.08	.4550	5.9053	.0327	.0092	.2439	.0031
-.04	.4774	5.7030	.0359	.0107	.2626	.0038
.00	.5000	5.5000	.0394	.0124	.2821	.0046
.04	.5226	5.2970	.0432	.0144	.3026	.0056
.08	.5450	5.0946	.0473	.0166	.3239	.0068
.12	.5674	4.8936	.0518	.0191	.3462	.0082
.16	.5895	4.6944	.0566	.0218	.3693	.0098
.20	.6114	4.4978	.0618	.0250	.3933	.0117
.24	.6329	4.3043	.0675	.0285	.4182	.0139
.28	.6539	4.1145	.0736	.0324	.4439	.0164
.32	.6746	3.9289	.0802	.0368	.4705	.0193
.36	.6947	3.7479	.0873	.0417	.4979	.0227
.40	.7142	3.5722	.0950	.0472	.5261	.0265
.50	.7603	3.1577	.1170	.0634	.5998	.0385
.60	.8019	2.7826	.1434	.0840	.6780	.0546
.70	.8389	2.4498	.1749	.1099	.7601	.0759
.80	.8711	2.1605	.2121	.1417	.8456	.1032
.90	.8985	1.9138	.2557	.1804	.9341	.1373
1.00	.9214	1.7078	.3062	.2263	1.0251	.1792
1.50	.9831	1.1525	.6601	.5662	1.5043	.5059
2.CO	.9977	1.0210	1.1249	1.0276	2.0005	.9638
2.34	.9995	1.0042	1.4609	1.3632	2.3401	1.2990

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.4130	.7204	.0977	.C491	.5354	.0279

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.9768	.0491	.9768

TABLE V-A-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .00 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	10.0000	-.1000	-.0200	-1.0000	.0000
-1.00	.2629	9.2922	-.0174	-.0030	-.1799	.0002
-.90	.2812	9.0861	-.0145	-.0022	-.1527	.0003
-.80	.3032	8.8395	-.0112	-.0012	-.1235	.0005
-.70	.3289	8.5502	-.0076	-.0001	-.0920	.0007
-.60	.3585	8.2174	-.0035	.0013	-.0576	.0010
-.50	.3918	7.8423	.0012	.0031	-.0201	.0015
-.40	.4286	7.4278	.0065	.0053	.0209	.0022
-.36	.4443	7.2520	.0089	.0063	.0383	.0025
-.32	.4603	7.0711	.0114	.0074	.0564	.0029
-.28	.4768	6.8855	.0141	.0087	.0751	.0034
-.24	.4937	6.6957	.0170	.0101	.0946	.0040
-.20	.5109	6.5022	.0200	.0116	.1147	.0046
-.16	.5284	6.3056	.0233	.0133	.1354	.0054
-.12	.5461	6.1064	.0267	.0152	.1569	.0062
-.08	.5640	5.9053	.0304	.0172	.1791	.0072
-.04	.5820	5.7030	.0344	.0195	.2020	.0084
.00	.6000	5.5000	.0386	.0220	.2257	.0097
.04	.6180	5.2970	.0431	.0247	.2500	.0112
.08	.6360	5.0946	.0480	.0278	.2751	.0129
.12	.6539	4.8936	.0531	.0311	.3009	.0148
.16	.6716	4.6944	.0587	.0348	.3274	.0170
.20	.6891	4.4978	.0646	.0388	.3547	.0195
.24	.7063	4.3043	.0709	.0432	.3826	.0224
.28	.7232	4.1145	.0777	.0481	.4111	.0256
.32	.7397	3.9289	.0850	.0534	.4404	.0292
.36	.7557	3.7480	.0928	.0592	.4703	.0332
.40	.7714	3.5722	.1011	.0656	.5009	.0378
.50	.8082	3.1577	.1247	.0842	.5799	.0515
.60	.8415	2.7826	.1526	.1072	.6624	.0694
.70	.8711	2.4498	.1854	.1354	.7480	.0922
.80	.8968	2.1605	.2239	.1694	.8365	.1208
.90	.9188	1.9138	.2686	.2101	.9273	.1559
1.00	.9371	1.7078	.3200	.2578	1.0201	.1982
1.50	.9864	1.1525	.6768	.6034	1.5035	.5187
2.00	.9981	1.0211	1.1424	1.0661	2.0004	.9601
2.30	.9995	1.0052	1.4387	1.3621	2.3001	1.2439

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3742	.7613	.0957	.0615	.4811	.0348

ETA N	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.9570	.0529	.7657

TABLE V-A-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.0C C_A^2 = .C0 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.C0	.40C0	10.0000	-.2000	-.0800	-2.0000	.0000
-1.C0	.4472	9.2922	-.0375	-.0143	-.3849	.0006
-.90	.4609	9.0862	-.0326	-.0121	-.3395	.0008
-.80	.4774	8.8395	-.0273	-.0096	-.2926	.0011
-.70	.4967	8.5502	-.0217	-.0069	-.2440	.0015
-.60	.5188	8.2174	-.0157	-.0038	-.1932	.0021
-.50	.5438	7.8423	-.0091	-.0003	-.1401	.0029
-.40	.5715	7.4278	-.0018	.0038	-.0844	.0040
-.36	.5832	7.2520	.0014	.0056	-.0613	.0046
-.32	.5953	7.0711	.0047	.0075	-.0377	.0052
-.28	.6076	6.8855	.0081	.0096	-.0136	.0059
-.24	.6203	6.6957	.0117	.0118	.0109	.0067
-.20	.6332	6.5027	.0155	.0142	.0360	.0076
-.16	.6463	6.3056	.0195	.0167	.0616	.0086
-.12	.6596	6.1064	.0238	.0195	.0877	.0097
-.C8	.6730	5.9054	.0282	.0224	.1143	.0109
-.C4	.6865	5.7030	.0329	.0256	.1415	.0124
.00	.7000	5.5000	.0378	.0291	.1693	.0139
.C4	.7135	5.2970	.0431	.0328	.1975	.0157
.C8	.7270	5.0946	.0486	.0368	.2263	.0177
.12	.7404	4.8936	.0545	.0411	.2557	.0199
.16	.7537	4.6944	.0607	.0457	.2856	.0224
.20	.7668	4.4978	.0673	.0508	.3160	.0252
.24	.7797	4.3043	.0744	.0562	.3469	.0283
.28	.7924	4.1145	.0818	.0621	.3784	.0317
.32	.8047	3.9289	.0898	.0684	.4103	.0355
.36	.8168	3.7480	.0982	.0753	.4427	.0397
.40	.8285	3.5722	.1072	.0827	.4756	.0443
.50	.8562	3.1577	.1323	.1038	.5599	.0582
.60	.8812	2.7826	.1617	.1293	.6468	.0756
.70	.9033	2.4498	.1959	.1599	.7360	.0974
.80	.9226	2.1605	.2356	.1962	.8274	.1242
.90	.9391	1.9138	.2815	.2389	.9205	.1567
1.00	.9528	1.7078	.3339	.2885	1.0151	.1952
1.50	.9898	1.1525	.6936	.6397	1.5026	.4806
2.C0	.9986	1.0211	1.1599	1.1039	2.0003	.8681
2.24	.9995	1.0069	1.3967	1.3404	2.2401	1.0666

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3388	.8105	.0937	.C716	.4255	.0374

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.9371	.0568	.5623

TABLE V-A-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .C0 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	10.00C0	-.3000	-.1800	-3.0000	.0000
-1.C0	.6315	9.2922	-.0575	-.0339	-.5899	.0008
-.90	.6406	9.0862	-.0506	-.0295	-.5264	.0011
-.80	.6516	8.8395	-.0434	-.0248	-.4618	.0015
-.70	.6644	8.5502	-.0359	-.0199	-.3960	.0021
-.60	.6792	8.2174	-.0278	-.0145	-.3288	.0028
-.50	.6959	7.8423	-.0193	-.0086	-.2601	.0038
-.40	.7143	7.4278	-.0101	-.0021	-.1896	.0050
-.36	.7221	7.2520	-.0061	.0007	-.1608	.0056
-.32	.7302	7.0711	-.0021	.0037	-.1318	.0063
-.28	.7384	6.8855	.0021	.0068	-.1024	.0071
-.24	.7469	6.6957	.0065	.0100	-.0727	.0079
-.20	.7555	6.5022	.0111	.0134	-.0427	.0088
-.16	.7642	6.3056	.0158	.0171	-.0123	.0099
-.12	.7730	6.1064	.0208	.0209	.0185	.0110
-.08	.7820	5.9054	.0259	.0249	.0496	.0123
-.C4	.7910	5.7030	.0314	.0292	.0810	.0137
.00	.8000	5.5000	.0370	.0337	.1128	.0152
.C4	.8090	5.2970	.0430	.0385	.1450	.0169
.C8	.8180	5.0946	.0493	.0436	.1776	.0188
.12	.8270	4.8936	.0559	.0490	.2105	.0209
.16	.8358	4.6944	.0628	.0548	.2437	.0232
.20	.8445	4.4978	.0701	.0609	.2773	.0257
.24	.8531	4.3043	.0778	.0675	.3113	.0285
.28	.8616	4.1145	.0860	.0744	.3456	.0316
.32	.8698	3.9289	.0946	.0819	.3802	.0349
.36	.8779	3.7480	.1037	.0899	.4152	.0386
.40	.8857	3.5722	.1133	.0984	.4504	.0426
.50	.9041	3.1577	.1400	.1222	.5399	.0544
.60	.9208	2.7826	.1708	.1504	.6312	.0690
.70	.9356	2.4498	.2064	.1834	.7240	.0869
.80	.9484	2.1605	.2474	.2220	.8182	.1085
.90	.9594	1.9139	.2944	.2669	.9136	.1344
1.C0	.9685	1.7078	.3478	.3183	1.0101	.1648
1.50	.9932	1.1525	.7104	.6753	1.5017	.3855
2.00	.9991	1.0211	1.1774	1.1408	2.0002	.6816
2.16	.9995	1.0102	1.3349	1.2982	2.1601	.7822

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3067	.8671	.0917	.C794	.3687	.0338

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
.9168	.0609	.3668

TABLE V-B-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .20 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	10.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	9.2922	.0021	.0001	.0201	.0000
-.90	.1015	9.0861	.0029	.0002	.0273	.0000
-.80	.1289	8.8395	.0039	.0003	.0365	.0000
-.70	.1611	8.5502	.0052	.0005	.0481	.0001
-.60	.1981	8.2174	.0069	.0008	.0624	.0001
-.50	.2397	7.8423	.0091	.0013	.0799	.0002
-.40	.2858	7.4278	.0119	.0020	.1009	.0004
-.36	.3053	7.2520	.0132	.0024	.1104	.0005
-.32	.3254	7.0711	.0146	.0028	.1205	.0007
-.28	.3461	6.8855	.0161	.0033	.1313	.0008
-.24	.3671	6.6957	.0178	.0039	.1428	.0010
-.20	.3886	6.5022	.0197	.0046	.1549	.0013
-.16	.4105	6.3056	.0217	.0054	.1678	.0016
-.12	.4326	6.1064	.0239	.0064	.1813	.0020
-.08	.4550	5.9053	.0262	.0074	.1956	.0025
-.04	.4774	5.7030	.0288	.0086	.2107	.0031
.00	.5000	5.5000	.0316	.0100	.2264	.0037
.04	.5226	5.2970	.0347	.0116	.2430	.0045
.08	.5450	5.0946	.0380	.0133	.2602	.0055
.12	.5674	4.8936	.0416	.0153	.2782	.0066
.16	.5895	4.6944	.0456	.0176	.2970	.0079
.20	.6114	4.4978	.0498	.0202	.3165	.0094
.24	.6329	4.3043	.0544	.0230	.3368	.0112
.28	.6539	4.1145	.0594	.0262	.3578	.0133
.32	.6746	3.9289	.0648	.0298	.3795	.0157
.36	.6947	3.7479	.0707	.0339	.4020	.0184
.40	.7142	3.5722	.0770	.0383	.4252	.0216
.50	.7603	3.1577	.0952	.0517	.4862	.0315
.60	.8019	2.7826	.1172	.0690	.5514	.0450
.70	.8389	2.4498	.1438	.0908	.6206	.0629
.80	.8711	2.1605	.1756	.1180	.6937	.0862
.90	.8985	1.9138	.2134	.1515	.7705	.1159
1.00	.9214	1.7078	.2578	.1920	.8506	.1527
1.50	.9831	1.1525	.5867	.5080	1.2948	.4565
2.00	.9977	1.0210	1.0429	.9609	1.7816	.9060
2.34	.9995	1.0042	1.3779	1.2954	2.1201	1.2402

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.4321	.7294	.0825	.0423	.4443	.0244

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.0446	.0423	1.0309

TABLE V-B-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .20 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	10.0000	-.0801	-.0160	-.8006	.0000
-1.00	.2629	9.2922	-.0140	-.0024	-.1440	.0002
-.90	.2812	9.0861	-.0116	-.0018	-.1222	.0003
-.80	.3032	8.8395	-.0090	-.0010	-.0988	.0004
-.70	.3289	8.5502	-.0061	-.0001	-.0735	.0005
-.60	.3585	8.2174	-.0028	.0011	-.0460	.0008
-.50	.3918	7.8423	.0010	.0025	-.0159	.0012
-.40	.4286	7.4278	.0053	.0042	.0171	.0017
-.36	.4443	7.2520	.0072	.0051	.0311	.0020
-.32	.4603	7.0711	.0092	.0060	.0457	.0024
-.28	.4768	6.8855	.0114	.0070	.0608	.0027
-.24	.4937	6.6957	.0137	.0081	.0764	.0032
-.20	.5109	6.5022	.0161	.0094	.0926	.0037
-.16	.5284	6.3056	.0188	.0107	.1094	.0043
-.12	.5461	6.1064	.0216	.0122	.1267	.0050
-.08	.5640	5.9053	.0246	.0139	.1447	.0058
-.04	.5820	5.7030	.0278	.0157	.1632	.0067
.00	.6000	5.5000	.0312	.0177	.1824	.0078
.04	.6180	5.2970	.0348	.0200	.2021	.0090
.08	.6360	5.0946	.0388	.0224	.2225	.0104
.12	.6539	4.8936	.0430	.0251	.2435	.0120
.16	.6716	4.6944	.0475	.0281	.2651	.0138
.20	.6891	4.4978	.0523	.0314	.2873	.0158
.24	.7063	4.3043	.0575	.0350	.3101	.0181
.28	.7232	4.1145	.0631	.0390	.3336	.0208
.32	.7397	3.9289	.0690	.0434	.3576	.0237
.36	.7557	3.7480	.0755	.0482	.3823	.0271
.40	.7714	3.5722	.0824	.0535	.4075	.0308
.50	.8082	3.1577	.1019	.0689	.4732	.0423
.60	.8415	2.7826	.1253	.0882	.5424	.0573
.70	.8711	2.4498	.1532	.1121	.6150	.0766
.80	.8968	2.1605	.1862	.1413	.6909	.1012
.90	.9188	1.9138	.2252	.1767	.7700	.1318
1.00	.9371	1.7078	.2706	.2190	.8521	.1691
1.50	.9864	1.1525	.6030	.5409	1.3012	.4678
2.00	.9981	1.0211	1.0602	.9955	1.7891	.9014
2.30	.9995	1.0052	1.3556	1.2905	2.0878	1.1843

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3942	.7691	.0814	.0527	.4038	.0303

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
1.0258	.0455	.8110

TABLE V-B-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .20 PHI B = .40

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.4000	10.0000	-.1605	-.0642	-1.6051	.0000
-1.00	.4472	9.2922	-.0301	-.0115	-.3088	.0004
-.90	.4609	9.0862	-.0261	-.0097	-.2723	.0006
-.80	.4774	8.8395	-.0219	-.0077	-.2346	.0009
-.70	.4967	8.5502	-.0174	-.0055	-.1955	.0012
-.60	.5188	8.2174	-.0125	-.0031	-.1546	.0017
-.50	.5438	7.8423	-.0072	-.0002	-.1118	.0024
-.40	.5715	7.4278	-.0013	.0031	-.0669	.0032
-.36	.5832	7.2520	.0012	.0045	-.0482	.0037
-.32	.5953	7.0711	.0039	.0061	-.0292	.0042
-.28	.6076	6.8855	.0067	.0078	-.0097	.0047
-.24	.6203	6.6957	.0096	.0096	.0101	.0054
-.20	.6332	6.5022	.0127	.0115	.0304	.0061
-.16	.6463	6.3056	.0159	.0136	.0512	.0069
-.12	.6596	6.1064	.0193	.0158	.0723	.0078
-.08	.6730	5.9054	.0229	.0182	.0940	.0088
-.04	.6865	5.7030	.0267	.0208	.1161	.0100
.00	.7000	5.5000	.0308	.0236	.1387	.0113
.04	.7135	5.2970	.0350	.0266	.1617	.0127
.08	.7270	5.0946	.0396	.0299	.1852	.0144
.12	.7404	4.8936	.0444	.0334	.2092	.0162
.16	.7537	4.6944	.0495	.0372	.2337	.0182
.20	.7668	4.4978	.0549	.0413	.2586	.0205
.24	.7797	4.3043	.0607	.0458	.2841	.0230
.28	.7924	4.1145	.0669	.0507	.3100	.0258
.32	.8047	3.9289	.0734	.0559	.3364	.0290
.36	.8168	3.7480	.0804	.0616	.3633	.0325
.40	.8285	3.5722	.0879	.0677	.3906	.0363
.50	.8562	3.1577	.1089	.0854	.4610	.0479
.60	.8812	2.7826	.1336	.1069	.5342	.0626
.70	.9033	2.4498	.1628	.1329	.6103	.0812
.80	.9226	2.1605	.1971	.1643	.6891	.1043
.90	.9391	1.9138	.2372	.2016	.7705	.1327
1.00	.9528	1.7078	.2837	.2457	.8545	.1669
1.50	.9898	1.1525	.6196	.5737	1.3086	.4335
2.00	.9986	1.0211	1.0778	1.0299	1.7976	.8144
2.24	.9995	1.0069	1.3138	1.2656	2.0365	1.0121

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.3593	.8166	.0803	.0615	.3628	.0324

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.0065	.0489	.5980

TABLE V-B-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .20 PHI B = .60

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.6000	10.0000	-.2417	-.1450	-2.4174	.0000
-1.00	.6315	9.2922	-.0463	-.0273	-.4752	.0006
-.90	.6406	9.0862	-.0408	-.0237	-.4238	.0009
-.80	.6516	8.8395	-.0349	-.0200	-.3717	.0012
-.70	.6644	8.5502	-.0288	-.0160	-.3185	.0017
-.60	.6792	8.2174	-.0224	-.0116	-.2642	.0023
-.50	.6959	7.8423	-.0154	-.0068	-.2086	.0030
-.40	.7143	7.4278	-.0079	-.0016	-.1514	.0041
-.36	.7221	7.2520	-.0048	.0007	-.1281	.0046
-.32	.7302	7.0711	-.0015	.0031	-.1045	.0051
-.28	.7384	6.8855	.0019	.0056	-.0807	.0057
-.24	.7469	6.6957	.0055	.0083	-.0565	.0064
-.20	.7555	6.5022	.0092	.0110	-.0320	.0072
-.16	.7642	6.3056	.0131	.0140	-.0073	.0080
-.12	.7730	6.1064	.0171	.0171	.0178	.0089
-.08	.7820	5.9054	.0213	.0204	.0432	.0100
-.04	.7910	5.7030	.0258	.0239	.0689	.0111
.00	.8000	5.5000	.0304	.0276	.0949	.0124
.04	.8090	5.2970	.0353	.0315	.1213	.0138
.08	.8180	5.0946	.0405	.0357	.1480	.0153
.12	.8270	4.8936	.0459	.0401	.1751	.0171
.16	.8358	4.6944	.0516	.0449	.2025	.0189
.20	.8445	4.4978	.0576	.0500	.2302	.0210
.24	.8531	4.3043	.0640	.0554	.2583	.0233
.28	.8616	4.1145	.0708	.0612	.2867	.0259
.32	.8698	3.9289	.0779	.0674	.3155	.0287
.36	.8779	3.7480	.0855	.0740	.3446	.0317
.40	.8857	3.5722	.0936	.0811	.3741	.0351
.50	.9041	3.1577	.1160	.1012	.4493	.0450
.60	.9208	2.7826	.1421	.1250	.5267	.0573
.70	.9356	2.4498	.1726	.1533	.6062	.0727
.80	.9484	2.1605	.2081	.1868	.6879	.0914
.90	.9594	1.9139	.2494	.2262	.7717	.1142
1.00	.9685	1.7078	.2971	.2722	.8577	.1413
1.50	.9932	1.1525	.6365	.6063	1.3168	.3480
2.00	.9991	1.0211	1.0957	1.0641	1.8069	.6392
2.16	.9995	1.0102	1.2526	1.2209	1.9661	.7394

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.3272	.8713	.0793	.0685	.3207	.0292

ETA N	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
.9866	.0524	.3918

TABLE V-C-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.0C C_A^2 = .40 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	10.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	9.2922	.0016	.0001	.0151	.0000
-.90	.1015	9.0861	.0022	.0001	.0205	.0000
-.80	.1289	8.8395	.0029	.0002	.0274	.0000
-.70	.1611	8.5502	.0039	.0004	.0360	.0000
-.60	.1981	8.2174	.0052	.0006	.0468	.0001
-.50	.2397	7.8423	.0068	.0009	.0600	.0002
-.40	.2858	7.4278	.0089	.0015	.0758	.0003
-.36	.3053	7.2520	.0099	.0018	.0829	.0004
-.32	.3254	7.0711	.0110	.0021	.0905	.0005
-.28	.3461	6.8855	.0121	.0025	.0986	.0006
-.24	.3671	6.6957	.0134	.0030	.1072	.0008
-.20	.3886	6.5022	.0148	.0035	.1164	.0010
-.16	.4105	6.3056	.0163	.0041	.1261	.0012
-.12	.4326	6.1064	.0179	.0048	.1363	.0015
-.08	.4550	5.9053	.0197	.0056	.1471	.0019
-.04	.4774	5.7030	.0217	.0065	.1585	.0023
.00	.5000	5.5000	.0238	.0075	.1704	.0028
.04	.5226	5.2970	.0261	.0087	.1829	.0034
.08	.5450	5.0946	.0287	.0101	.1960	.0041
.12	.5674	4.8936	.0314	.0116	.2097	.0050
.16	.5895	4.6944	.0344	.0133	.2240	.0060
.20	.6114	4.4978	.0376	.0153	.2389	.0072
.24	.6329	4.3043	.0411	.0175	.2543	.0085
.28	.6539	4.1145	.0450	.0199	.2704	.0101
.32	.6746	3.9289	.0491	.0227	.2871	.0119
.36	.6947	3.7479	.0536	.0258	.3044	.0140
.40	.7142	3.5722	.0585	.0292	.3222	.0165
.50	.7603	3.1577	.0726	.0396	.3696	.0242
.60	.8019	2.7826	.0899	.0531	.4207	.0347
.70	.8389	2.4498	.1110	.0704	.4756	.0490
.80	.8711	2.1605	.1366	.0924	.5344	.0677
.90	.8985	1.9138	.1675	.1198	.5973	.0920
1.00	.9214	1.7078	.2046	.1535	.6642	.1228
1.50	.9831	1.1525	.4993	.4369	1.0607	.3953
2.00	.9977	1.0210	.9420	.8764	1.5329	.8316
2.34	.9995	1.0042	1.2752	1.2092	1.8696	1.1639

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.4559	.7405	.0660	.0347	.3482	.0205

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.1308	.0347	1.1008

TABLE V-C-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .40 PHI B = .20

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.2000	10.0000	-.0601	-.0120	-.6010	.0000
-1.00	.2629	9.2922	-.0105	-.0018	-.1081	.0001
-.90	.2812	9.0861	-.0087	-.0013	-.0917	.0002
-.80	.3032	8.8395	-.0067	-.0007	-.0741	.0003
-.70	.3289	8.5502	-.0045	-.0001	-.0551	.0004
-.60	.3585	8.2174	-.0021	.0008	-.0344	.0006
-.50	.3918	7.8423	.0007	.0019	-.0117	.0009
-.40	.4286	7.4278	.0040	.0032	.0131	.0013
-.36	.4443	7.2520	.0054	.0038	.0237	.0015
-.32	.4603	7.0711	.0070	.0045	.0347	.0018
-.28	.4768	6.8855	.0086	.0053	.0461	.0021
-.24	.4937	6.6957	.0103	.0061	.0579	.0024
-.20	.5109	6.5022	.0122	.0071	.0701	.0028
-.16	.5284	6.3056	.0142	.0081	.0828	.0033
-.12	.5461	6.1064	.0163	.0092	.0959	.0038
-.08	.5640	5.9053	.0186	.0105	.1095	.0044
-.04	.5820	5.7030	.0210	.0119	.1236	.0051
.00	.6000	5.5000	.0236	.0134	.1381	.0059
.04	.6180	5.2970	.0264	.0151	.1532	.0068
.08	.6360	5.0946	.0294	.0170	.1687	.0079
.12	.6539	4.8936	.0326	.0190	.1847	.0091
.16	.6716	4.6944	.0360	.0213	.2012	.0105
.20	.6891	4.4978	.0397	.0239	.2182	.0120
.24	.7063	4.3043	.0437	.0266	.2358	.0138
.28	.7232	4.1145	.0480	.0297	.2538	.0158
.32	.7397	3.9289	.0526	.0331	.2723	.0181
.36	.7557	3.7480	.0576	.0368	.2914	.0207
.40	.7714	3.5722	.0629	.0409	.3110	.0236
.50	.8082	3.1577	.0782	.0529	.3622	.0325
.60	.8415	2.7826	.0966	.0682	.4167	.0444
.70	.8711	2.4498	.1188	.0872	.4746	.0598
.80	.8968	2.1605	.1456	.1109	.5361	.0797
.90	.9188	1.9138	.1776	.1400	.6011	.1048
1.00	.9371	1.7078	.2158	.1754	.6700	.1362
1.50	.9864	1.1525	.5145	.4650	1.0723	.4049
2.00	.9981	1.0211	.9587	.9065	1.5460	.8261
2.30	.9995	1.0052	1.2524	1.1999	1.8431	1.1075

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.4192	.7787	.0656	.0430	.3205	.0251

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.1132	.0373	.8694

TABLE V-C-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .40 PHI B = .40

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.4000	10.0000	-.1208	-.0483	-1.2077	.0000
-1.00	.4472	9.2922	-.0226	-.0086	-.2323	.0003
-.90	.4609	9.0862	-.0196	-.0073	-.2048	.0005
-.80	.4774	8.8395	-.0165	-.0058	-.1764	.0007
-.70	.4967	8.5502	-.0131	-.0041	-.1468	.0009
-.60	.5188	8.2174	-.0094	-.0023	-.1160	.0013
-.50	.5438	7.8423	-.0054	-.0001	-.0837	.0018
-.40	.5715	7.4278	-.0009	.0023	-.0497	.0024
-.36	.5832	7.2520	.0010	.0035	-.0356	.0028
-.32	.5953	7.0711	.0030	.0046	-.0212	.0032
-.28	.6076	6.8855	.0051	.0059	-.0064	.0036
-.24	.6203	6.6957	.0074	.0073	.0086	.0041
-.20	.6332	6.5022	.0097	.0087	.0241	.0046
-.16	.6463	6.3056	.0122	.0103	.0398	.0052
-.12	.6596	6.1064	.0148	.0120	.0559	.0059
-.08	.6730	5.9054	.0175	.0138	.0724	.0067
-.04	.6865	5.7030	.0204	.0158	.0893	.0076
.00	.7000	5.5000	.0235	.0179	.1065	.0086
.04	.7135	5.2970	.0267	.0202	.1241	.0097
.08	.7270	5.0946	.0302	.0227	.1421	.0109
.12	.7404	4.8936	.0339	.0255	.1605	.0123
.16	.7537	4.6944	.0378	.0284	.1793	.0139
.20	.7668	4.4978	.0420	.0316	.1985	.0156
.24	.7797	4.3043	.0465	.0350	.2182	.0176
.28	.7924	4.1145	.0512	.0388	.2382	.0198
.32	.8047	3.9289	.0563	.0428	.2587	.0222
.36	.8168	3.7480	.0618	.0472	.2796	.0249
.40	.8285	3.5722	.0676	.0520	.3009	.0279
.50	.8562	3.1577	.0840	.0659	.3561	.0370
.60	.8812	2.7826	.1037	.0830	.4142	.0487
.70	.9033	2.4498	.1271	.1038	.4752	.0636
.80	.9226	2.1605	.1550	.1293	.5393	.0824
.90	.9391	1.9138	.1882	.1603	.6067	.1059
1.00	.9528	1.7078	.2274	.1974	.6775	.1347
1.50	.9898	1.1525	.5303	.4933	1.0856	.3754
2.00	.9986	1.0211	.9759	.9369	1.5609	.7457
2.24	.9995	1.0069	1.2105	1.1713	1.7985	.9423

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.3848	.8241	.0653	.0502	.2927	.0267

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.0949	.0401	.6440

TABLE V-C-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .40 PHI B = .60

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.6000	10.0000	-.1826	-.1096	-1.8263	.0000
-1.00	.6315	9.2922	-.0350	-.0206	-.3588	.0005
-.90	.6406	9.0862	-.0308	-.0179	-.3200	.0007
-.80	.6516	8.8395	-.0264	-.0151	-.2805	.0009
-.70	.6644	8.5502	-.0217	-.0120	-.2402	.0013
-.60	.6792	8.2174	-.0168	-.0087	-.1990	.0017
-.50	.6959	7.8423	-.0116	-.0051	-.1568	.0023
-.40	.7143	7.4278	-.0059	-.0011	-.1134	.0031
-.36	.7221	7.2520	-.0035	.0006	-.0956	.0035
-.32	.7302	7.0711	-.0010	.0025	-.0777	.0039
-.28	.7384	6.8855	.0017	.0044	-.0595	.0043
-.24	.7469	6.6957	.0044	.0064	-.0411	.0049
-.20	.7555	6.5022	.0072	.0085	-.0224	.0054
-.16	.7642	6.3056	.0102	.0108	-.0035	.0061
-.12	.7730	6.1064	.0132	.0131	.0157	.0068
-.08	.7820	5.9054	.0165	.0157	.0351	.0076
-.04	.7910	5.7030	.0199	.0183	.0549	.0085
.00	.8000	5.5000	.0234	.0212	.0749	.0094
.04	.8090	5.2970	.0272	.0242	.0951	.0105
.08	.8180	5.0946	.0312	.0274	.1157	.0117
.12	.8270	4.8936	.0353	.0308	.1366	.0130
.16	.8358	4.6944	.0398	.0345	.1578	.0145
.20	.8445	4.4978	.0444	.0385	.1792	.0161
.24	.8531	4.3043	.0494	.0427	.2010	.0179
.28	.8616	4.1145	.0547	.0472	.2232	.0199
.32	.8698	3.9289	.0602	.0520	.2456	.0221
.36	.8779	3.7480	.0662	.0572	.2684	.0245
.40	.8857	3.5722	.0725	.0628	.2915	.0271
.50	.9041	3.1577	.0902	.0786	.3509	.0349
.60	.9208	2.7826	.1110	.0976	.4126	.0448
.70	.9356	2.4498	.1356	.1205	.4768	.0571
.80	.9484	2.1605	.1648	.1479	.5437	.0725
.90	.9594	1.9139	.1991	.1807	.6134	.0914
1.00	.9685	1.7078	.2395	.2196	.6863	.1144
1.50	.9932	1.1525	.5466	.5220	1.1004	.3016
2.00	.9991	1.0211	.9937	.9677	1.5772	.5850
2.16	.9995	1.0102	1.1495	1.1235	1.7354	.6846

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.3528	.8764	.0651	.0562	.2643	.0240

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.0756	.0430	.4240

TABLE V-D-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .60 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	10.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	9.2922	.0010	.0000	.0101	.0000
-.90	.1015	9.0861	.0014	.0001	.0136	.0000
-.80	.1289	8.8395	.0019	.0001	.0182	.0000
-.70	.1611	8.5502	.0026	.0002	.0240	.0000
-.60	.1981	8.2174	.0035	.0004	.0312	.0001
-.50	.2397	7.8423	.0046	.0006	.0400	.0001
-.40	.2858	7.4278	.0060	.0010	.0506	.0002
-.36	.3053	7.2520	.0066	.0012	.0553	.0003
-.32	.3254	7.0711	.0073	.0014	.0604	.0003
-.28	.3461	6.8855	.0081	.0017	.0658	.0004
-.24	.3671	6.6957	.0089	.0020	.0716	.0005
-.20	.3886	6.5022	.0099	.0023	.0777	.0007
-.16	.4105	6.3056	.0109	.0027	.0842	.0008
-.12	.4326	6.1064	.0120	.0032	.0911	.0010
-.08	.4550	5.9053	.0132	.0037	.0983	.0013
-.04	.4774	5.7030	.0145	.0043	.1059	.0015
.00	.5000	5.5000	.0159	.0050	.1140	.0019
.04	.5226	5.2970	.0175	.0058	.1224	.0023
.08	.5450	5.0946	.0192	.0068	.1312	.0028
.12	.5674	4.8936	.0211	.0078	.1405	.0034
.16	.5895	4.6944	.0231	.0090	.1501	.0040
.20	.6114	4.4978	.0253	.0103	.1602	.0048
.24	.6329	4.3043	.0277	.0118	.1707	.0057
.28	.6539	4.1145	.0303	.0134	.1817	.0068
.32	.6746	3.9289	.0331	.0153	.1930	.0081
.36	.6947	3.7479	.0362	.0174	.2049	.0095
.40	.7142	3.5722	.0395	.0198	.2171	.0112
.50	.7603	3.1577	.0493	.0270	.2498	.0165
.60	.8019	2.7826	.0613	.0364	.2855	.0239
.70	.8389	2.4498	.0762	.0487	.3244	.0340
.80	.8711	2.1605	.0947	.0644	.3667	.0475
.90	.8985	1.9138	.1174	.0846	.4128	.0653
1.00	.9214	1.7078	.1453	.1099	.4631	.0884
1.50	.9831	1.1525	.3900	.3455	.7908	.3152
2.00	.9977	1.0210	.8086	.7610	1.2368	.7276
2.34	.9995	1.0042	1.1383	1.0903	1.5700	1.0566

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.4877	.7548	.0480	.0260	.2457	.0158

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.2497	.0260	1.1991

TABLE V-D-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .60 PHI B = .20

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.2000	10.0000	-.0401	-.0080	-.4010	.0000
-1.00	.2629	9.2922	-.0070	-.0012	-.0721	.0001
-.90	.2812	9.0861	-.0058	-.0009	-.0611	.0001
-.80	.3032	8.8395	-.0045	-.0005	-.0494	.0002
-.70	.3289	8.5502	-.0030	-.0000	-.0367	.0003
-.60	.3585	8.2174	-.0014	.0005	-.0228	.0004
-.50	.3918	7.8423	.0005	.0012	-.0077	.0006
-.40	.4286	7.4278	.0027	.0021	.0089	.0009
-.36	.4443	7.2520	.0037	.0026	.0160	.0010
-.32	.4603	7.0711	.0047	.0030	.0234	.0012
-.28	.4768	6.8855	.0058	.0035	.0310	.0014
-.24	.4937	6.6957	.0069	.0041	.0390	.0016
-.20	.5109	6.5022	.0082	.0047	.0472	.0019
-.16	.5284	6.3056	.0095	.0054	.0557	.0022
-.12	.5461	6.1064	.0110	.0062	.0646	.0025
-.08	.5640	5.9053	.0125	.0070	.0737	.0029
-.04	.5820	5.7030	.0141	.0080	.0832	.0034
.00	.6000	5.5000	.0159	.0090	.0930	.0040
.04	.6180	5.2970	.0178	.0102	.1032	.0046
.08	.6360	5.0946	.0198	.0114	.1137	.0053
.12	.6539	4.8936	.0220	.0128	.1246	.0061
.16	.6716	4.6944	.0243	.0144	.1358	.0071
.20	.6891	4.4978	.0268	.0161	.1474	.0081
.24	.7063	4.3043	.0295	.0180	.1593	.0093
.28	.7232	4.1145	.0325	.0201	.1717	.0107
.32	.7397	3.9289	.0356	.0224	.1844	.0123
.36	.7557	3.7480	.0390	.0250	.1975	.0141
.40	.7714	3.5722	.0427	.0278	.2110	.0161
.50	.8082	3.1577	.0533	.0362	.2466	.0223
.60	.8415	2.7826	.0663	.0469	.2849	.0306
.70	.8711	2.4498	.0821	.0604	.3261	.0416
.80	.8968	2.1605	.1015	.0776	.3706	.0560
.90	.9188	1.9138	.1252	.0991	.4187	.0746
1.00	.9371	1.7078	.1540	.1259	.4707	.0983
1.50	.9864	1.1525	.4034	.3677	.8048	.3229
2.00	.9981	1.0211	.8240	.7859	1.2530	.7218
2.30	.9995	1.0052	1.1145	1.0761	1.5469	1.0001

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.4523	.7910	.0480	.0319	.2293	.0191

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.2335	.0279	.9513

TABLE V-D-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .60 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.4000	10.0000	-.0808	-.0323	-.8078	.0000
-1.00	.4472	9.2922	-.0151	-.0058	-.1553	.0002
-.90	.4609	9.0862	-.0131	-.0049	-.1369	.0003
-.80	.4774	8.8395	-.0110	-.0039	-.1178	.0004
-.70	.4967	8.5502	-.0087	-.0028	-.0981	.0006
-.60	.5188	8.2174	-.0063	-.0015	-.0774	.0009
-.50	.5438	7.8423	-.0036	-.0001	-.0557	.0012
-.40	.5715	7.4278	-.0006	.0016	-.0328	.0016
-.36	.5832	7.2520	.0007	.0023	-.0233	.0019
-.32	.5953	7.0711	.0021	.0031	-.0136	.0021
-.28	.6076	6.8855	.0035	.0040	-.0037	.0024
-.24	.6203	6.6957	.0050	.0049	.0065	.0027
-.20	.6332	6.5022	.0066	.0059	.0169	.0031
-.16	.6463	6.3056	.0083	.0070	.0275	.0035
-.12	.6596	6.1064	.0100	.0081	.0384	.0040
-.08	.6730	5.9054	.0119	.0093	.0496	.0045
-.04	.6865	5.7030	.0138	.0107	.0610	.0051
.00	.7000	5.5000	.0159	.0121	.0727	.0058
.04	.7135	5.2970	.0181	.0137	.0847	.0065
.08	.7270	5.0946	.0205	.0154	.0969	.0074
.12	.7404	4.8936	.0230	.0172	.1095	.0083
.16	.7537	4.6944	.0257	.0193	.1223	.0094
.20	.7668	4.4978	.0286	.0214	.1355	.0106
.24	.7797	4.3043	.0316	.0238	.1490	.0119
.28	.7924	4.1145	.0349	.0264	.1628	.0134
.32	.8047	3.9289	.0384	.0292	.1769	.0151
.36	.8168	3.7480	.0422	.0322	.1913	.0170
.40	.8285	3.5722	.0462	.0356	.2061	.0191
.50	.8562	3.1577	.0577	.0453	.2448	.0254
.60	.8812	2.7826	.0716	.0573	.2858	.0337
.70	.9033	2.4498	.0884	.0723	.3295	.0444
.80	.9226	2.1605	.1087	.0909	.3762	.0581
.90	.9391	1.9138	.1334	.1139	.4263	.0755
1.00	.9528	1.7078	.1633	.1421	.4802	.0975
1.50	.9898	1.1525	.4173	.3904	.8208	.2996
2.00	.9986	1.0211	.8401	.8113	1.2713	.6510
2.24	.9995	1.0069	1.0719	1.0429	1.5061	.8453

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.4189	.8339	.0482	.0372	.2133	.0202

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
1.2164	.0299	.7081

TABLE V-D-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .60 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	10.0000	-.1226	-.0736	-1.2265	.0000
-1.00	.6315	9.2922	-.0235	-.0138	-.2409	.0003
-.90	.6406	9.0862	-.0206	-.0120	-.2147	.0004
-.80	.6516	8.8395	-.0177	-.0101	-.1882	.0006
-.70	.6644	8.5502	-.0146	-.0081	-.1610	.0008
-.60	.6792	8.2174	-.0113	-.0058	-.1333	.0011
-.50	.6959	7.8423	-.0077	-.0034	-.1048	.0015
-.40	.7143	7.4278	-.0039	-.0007	-.0754	.0021
-.36	.7221	7.2520	-.0022	.0005	-.0634	.0023
-.32	.7302	7.0711	-.0005	.0017	-.0513	.0026
-.28	.7384	6.8855	.0012	.0030	-.0389	.0029
-.24	.7469	6.6957	.0031	.0044	-.0265	.0033
-.20	.7555	6.5022	.0050	.0058	-.0138	.0037
-.16	.7642	6.3056	.0070	.0074	-.0009	.0041
-.12	.7730	6.1064	.0091	.0090	.0121	.0046
-.08	.7820	5.9054	.0113	.0107	.0253	.0051
-.04	.7910	5.7030	.0136	.0125	.0388	.0057
.00	.8000	5.5000	.0161	.0144	.0524	.0064
.04	.8090	5.2970	.0186	.0165	.0663	.0071
.08	.8180	5.0946	.0213	.0187	.0804	.0080
.12	.8270	4.8936	.0242	.0211	.0947	.0089
.16	.8358	4.6944	.0273	.0236	.1093	.0099
.20	.8445	4.4978	.0305	.0263	.1241	.0110
.24	.8531	4.3043	.0339	.0292	.1392	.0122
.28	.8616	4.1145	.0375	.0323	.1545	.0136
.32	.8698	3.9289	.0414	.0357	.1701	.0151
.36	.8779	3.7480	.0456	.0393	.1860	.0168
.40	.8857	3.5722	.0500	.0432	.2021	.0186
.50	.9041	3.1577	.0624	.0544	.2439	.0241
.60	.9208	2.7826	.0773	.0679	.2879	.0311
.70	.9356	2.4498	.0950	.0844	.3342	.0401
.80	.9484	2.1605	.1164	.1045	.3832	.0513
.90	.9594	1.9139	.1421	.1291	.4355	.0655
1.00	.9685	1.7078	.1731	.1589	.4913	.0831
1.50	.9932	1.1525	.4320	.4139	.8386	.2410
2.00	.9991	1.0211	.8568	.8375	1.2914	.5105
2.16	.9995	1.0102	1.0107	.9912	1.4476	.6087

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.3872	.8832	.0485	.0420	.1969	.0180

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
1.1979	.0321	.4687

TABLE V-E-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .80 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	10.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	9.2922	.0005	.0000	.0050	.0000
-.90	.1015	9.0861	.0007	.0000	.0068	.0000
-.80	.1289	8.8395	.0010	.0001	.0091	.0000
-.70	.1611	8.5502	.0013	.0001	.0120	.0000
-.60	.1981	8.2174	.0017	.0002	.0156	.0000
-.50	.2397	7.8423	.0023	.0003	.0200	.0001
-.40	.2858	7.4278	.0030	.0005	.0253	.0001
-.36	.3053	7.2520	.0033	.0006	.0277	.0001
-.32	.3254	7.0711	.0037	.0007	.0302	.0002
-.28	.3461	6.8855	.0040	.0008	.0330	.0002
-.24	.3671	6.6957	.0045	.0010	.0359	.0003
-.20	.3886	6.5022	.0049	.0012	.0389	.0003
-.16	.4105	6.3056	.0055	.0014	.0422	.0004
-.12	.4326	6.1064	.0060	.0016	.0456	.0005
-.08	.4550	5.9053	.0066	.0019	.0493	.0006
-.04	.4774	5.7030	.0073	.0022	.0531	.0008
.00	.5000	5.5000	.0080	.0025	.0572	.0009
.04	.5226	5.2970	.0088	.0029	.0614	.0012
.08	.5450	5.0946	.0096	.0034	.0659	.0014
.12	.5674	4.8936	.0106	.0039	.0706	.0017
.16	.5895	4.6944	.0116	.0045	.0755	.0020
.20	.6114	4.4978	.0127	.0052	.0806	.0024
.24	.6329	4.3043	.0139	.0059	.0860	.0029
.28	.6539	4.1145	.0153	.0068	.0916	.0035
.32	.6746	3.9289	.0167	.0078	.0974	.0041
.36	.6947	3.7479	.0183	.0088	.1035	.0048
.40	.7142	3.5722	.0200	.0101	.1098	.0057
.50	.7603	3.1577	.0251	.0138	.1267	.0085
.60	.8019	2.7826	.0314	.0187	.1455	.0123
.70	.8389	2.4498	.0394	.0253	.1662	.0177
.80	.8711	2.1605	.0494	.0338	.1891	.0250
.90	.8985	1.9138	.0620	.0450	.2148	.0349
1.00	.9214	1.7078	.0780	.0596	.2436	.0482
1.50	.9831	1.1525	.2418	.2175	.4611	.2004
2.00	.9977	1.0210	.6035	.5766	.8457	.5569
2.34	.9995	1.0042	.9233	.8960	1.1688	.8760

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.5372	.7763	.0273	.0155	.1335	.0098

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.4440	.0155	1.3642

TABLE V-B-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .80 PHI B = .20

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.2000	10.0000	-.0201	-.0040	-.2006	.0000
-1.00	.2629	9.2922	-.0035	-.0006	-.0361	.0000
-.90	.2812	9.0861	-.0029	-.0004	-.0306	.0001
-.80	.3032	8.8395	-.0022	-.0002	-.0247	.0001
-.70	.3289	8.5502	-.0015	-.0000	-.0183	.0001
-.60	.3585	8.2174	-.0007	.0003	-.0114	.0002
-.50	.3918	7.8423	.0003	.0006	-.0038	.0003
-.40	.4286	7.4278	.0014	.0011	.0046	.0004
-.36	.4443	7.2520	.0018	.0013	.0081	.0005
-.32	.4603	7.0711	.0024	.0015	.0118	.0006
-.28	.4768	6.8855	.0029	.0018	.0157	.0007
-.24	.4937	6.6957	.0035	.0021	.0197	.0008
-.20	.5109	6.5022	.0041	.0024	.0238	.0009
-.16	.5284	6.3056	.0048	.0027	.0281	.0011
-.12	.5461	6.1064	.0055	.0031	.0326	.0013
-.08	.5640	5.9053	.0063	.0035	.0372	.0015
-.04	.5820	5.7030	.0071	.0040	.0420	.0017
.00	.6000	5.5000	.0080	.0045	.0470	.0020
.04	.6180	5.2970	.0090	.0051	.0521	.0023
.08	.6360	5.0946	.0100	.0058	.0575	.0027
.12	.6539	4.8936	.0111	.0065	.0630	.0031
.16	.6716	4.6944	.0123	.0073	.0687	.0036
.20	.6891	4.4978	.0136	.0082	.0747	.0041
.24	.7063	4.3043	.0150	.0091	.0808	.0047
.28	.7232	4.1145	.0165	.0102	.0871	.0054
.32	.7397	3.9289	.0181	.0114	.0937	.0063
.36	.7557	3.7480	.0199	.0127	.1004	.0072
.40	.7714	3.5722	.0218	.0142	.1074	.0082
.50	.8082	3.1577	.0273	.0186	.1260	.0115
.60	.8415	2.7826	.0342	.0242	.1462	.0158
.70	.8711	2.4498	.0427	.0315	.1684	.0217
.80	.8968	2.1605	.0532	.0408	.1927	.0296
.90	.9188	1.9138	.0665	.0529	.2196	.0400
1.00	.9371	1.7078	.0832	.0684	.2497	.0537
1.50	.9864	1.1525	.2514	.2317	.4732	.2055
2.00	.9981	1.0211	.6163	.5946	.8612	.5518
2.30	.9995	1.0052	.8978	.8757	1.1459	.8214

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.5039	.8096	.0276	.0188	.1268	.0116

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
1.4298	.0165	1.0880

TABLE V-E-3

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TCA =10.00 C_A^2 = .80 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.4000	10.0000	-.0405	-.0162	-.4052	.0000
-1.00	.4472	9.2922	-.0076	-.0029	-.0779	.0001
-.90	.4609	9.0862	-.0066	-.0024	-.0686	.0002
-.80	.4774	8.8395	-.0055	-.0019	-.0591	.0002
-.70	.4967	8.5502	-.0044	-.0014	-.0491	.0003
-.60	.5188	8.2174	-.0031	-.0008	-.0387	.0004
-.50	.5438	7.8423	-.0018	-.0000	-.0278	.0006
-.40	.5715	7.4278	-.0003	.0008	-.0162	.0008
-.36	.5832	7.2520	.0004	.0012	-.0114	.0009
-.32	.5953	7.0711	.0011	.0016	-.0065	.0011
-.28	.6076	6.8855	.0018	.0020	-.0015	.0012
-.24	.6203	6.6957	.0026	.0025	.0036	.0014
-.20	.6332	6.5022	.0034	.0030	.0089	.0016
-.16	.6463	6.3056	.0042	.0035	.0143	.0018
-.12	.6596	6.1064	.0051	.0041	.0198	.0020
-.08	.6730	5.9054	.0060	.0047	.0255	.0023
-.04	.6865	5.7030	.0070	.0054	.0313	.0026
.00	.7000	5.5000	.0081	.0062	.0372	.0029
.04	.7135	5.2970	.0092	.0070	.0433	.0033
.08	.7270	5.0946	.0104	.0078	.0496	.0037
.12	.7404	4.8936	.0117	.0088	.0560	.0042
.16	.7537	4.6944	.0131	.0098	.0626	.0048
.20	.7668	4.4978	.0146	.0109	.0694	.0054
.24	.7797	4.3043	.0161	.0121	.0763	.0061
.28	.7924	4.1145	.0178	.0135	.0834	.0069
.32	.8047	3.9289	.0197	.0149	.0908	.0077
.36	.8168	3.7480	.0216	.0165	.0983	.0087
.40	.8285	3.5722	.0237	.0182	.1060	.0098
.50	.8562	3.1577	.0298	.0233	.1263	.0131
.60	.8812	2.7826	.0372	.0298	.1481	.0175
.70	.9033	2.4498	.0462	.0379	.1718	.0233
.80	.9226	2.1605	.0574	.0481	.1975	.0309
.90	.9391	1.9138	.0714	.0611	.2258	.0407
1.00	.9528	1.7078	.0888	.0776	.2572	.0535
1.50	.9898	1.1525	.2615	.2465	.4869	.1911
2.00	.9986	1.0211	.6299	.6133	.8786	.4974
2.24	.9995	1.0069	.8539	.8371	1.1055	.6852

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.4717	.8486	.0280	.0218	.1204	.0121

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
1.4141	.0177	.8143

TABLE V-B-1

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .80 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	10.0000	-.0618	-.0371	-.6178	.0000
-1.00	.6315	9.2922	-.0118	-.0070	-.1213	.0002
-.90	.6406	9.0862	-.0104	-.0061	-.1081	.0002
-.80	.6516	8.8395	-.0089	-.0051	-.0947	.0003
-.70	.6644	8.5502	-.0073	-.0040	-.0810	.0004
-.60	.6792	8.2174	-.0056	-.0029	-.0669	.0006
-.50	.6959	7.8423	-.0038	-.0017	-.0525	.0008
-.40	.7143	7.4278	-.0019	-.0003	-.0376	.0010
-.36	.7221	7.2520	-.0011	.0003	-.0315	.0012
-.32	.7302	7.0711	-.0002	.0009	-.0254	.0013
-.28	.7384	6.8855	.0007	.0016	-.0191	.0015
-.24	.7469	6.6957	.0016	.0023	-.0127	.0017
-.20	.7555	6.5022	.0026	.0030	-.0063	.0019
-.16	.7642	6.3056	.0036	.0038	.0003	.0021
-.12	.7730	6.1064	.0047	.0046	.0069	.0023
-.08	.7820	5.9054	.0058	.0055	.0137	.0026
-.04	.7910	5.7030	.0070	.0064	.0206	.0029
.00	.8000	5.5000	.0083	.0074	.0276	.0033
.04	.8090	5.2970	.0096	.0085	.0347	.0036
.08	.8180	5.0946	.0110	.0096	.0419	.0041
.12	.8270	4.8936	.0125	.0108	.0493	.0045
.16	.8358	4.6944	.0140	.0121	.0568	.0050
.20	.8445	4.4978	.0157	.0135	.0645	.0056
.24	.8531	4.3043	.0175	.0150	.0723	.0063
.28	.8616	4.1145	.0194	.0167	.0803	.0070
.32	.8698	3.9289	.0214	.0184	.0884	.0078
.36	.8779	3.7480	.0236	.0203	.0967	.0086
.40	.8857	3.5722	.0259	.0223	.1052	.0096
.50	.9041	3.1577	.0325	.0283	.1274	.0125
.60	.9208	2.7826	.0404	.0355	.1509	.0163
.70	.9356	2.4498	.0501	.0445	.1762	.0212
.80	.9484	2.1605	.0620	.0557	.2034	.0274
.90	.9594	1.9139	.0767	.0697	.2332	.0355
1.00	.9685	1.7078	.0949	.0873	.2660	.0459
1.50	.9932	1.1525	.2724	.2621	.5022	.1543
2.00	.9991	1.0211	.6441	.6328	.8976	.3901
2.14	.9995	1.0112	.7732	.7619	1.0288	.4726

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.4404	.8933	.0284	.0246	.1140	.0107

ETA M	(SIGMA)X(STANTON NO.)	$(SIGMA)X(V_B/U_A)$
1.3952	.0189	.5417

TABLE V-F-1

TABLE OF ALXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .90 PHI B = .00

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.0000	10.0000	-.0000	-.0000	-.0000	.0000
-1.00	.0786	9.2922	.0003	.0000	.0025	.0000
-.90	.1015	9.0861	.0004	.0000	.0034	.0000
-.80	.1289	8.8395	.0005	.0000	.0046	.0000
-.70	.1611	8.5502	.0007	.0001	.0060	.0000
-.60	.1981	8.2174	.0009	.0001	.0078	.0000
-.50	.2397	7.8423	.0011	.0002	.0100	.0000
-.40	.2858	7.4278	.0015	.0002	.0127	.0001
-.36	.3053	7.2520	.0017	.0003	.0138	.0001
-.32	.3254	7.0711	.0018	.0004	.0151	.0001
-.28	.3461	6.8855	.0020	.0004	.0165	.0001
-.24	.3671	6.6957	.0022	.0005	.0179	.0001
-.20	.3886	6.5022	.0025	.0006	.0195	.0002
-.16	.4105	6.3056	.0027	.0007	.0211	.0002
-.12	.4326	6.1064	.0030	.0008	.0228	.0003
-.08	.4550	5.9053	.0033	.0009	.0247	.0003
-.04	.4774	5.7030	.0036	.0011	.0266	.0004
.00	.5000	5.5000	.0040	.0013	.0286	.0005
.04	.5226	5.2970	.0044	.0015	.0308	.0006
.08	.5450	5.0946	.0048	.0017	.0330	.0007
.12	.5674	4.8936	.0053	.0020	.0354	.0008
.16	.5895	4.6944	.0058	.0023	.0378	.0010
.20	.6114	4.4978	.0064	.0026	.0404	.0012
.24	.6329	4.3043	.0070	.0030	.0431	.0015
.28	.6539	4.1145	.0077	.0034	.0460	.0017
.32	.6746	3.9289	.0084	.0039	.0489	.0021
.36	.6947	3.7479	.0092	.0045	.0520	.0024
.40	.7142	3.5722	.0101	.0051	.0552	.0029
.50	.7603	3.1577	.0127	.0070	.0638	.0043
.60	.8019	2.7826	.0159	.0095	.0734	.0063
.70	.8389	2.4498	.0200	.0129	.0841	.0090
.80	.8711	2.1605	.0252	.0174	.0961	.0129
.90	.8985	1.9138	.0319	.0233	.1097	.0181
1.00	.9214	1.7078	.0406	.0311	.1253	.0253
1.50	.9831	1.1525	.1400	.1271	.2565	.1178
2.00	.9977	1.0210	.4279	.4131	.5618	.4019
2.34	.9995	1.0042	.7298	.7146	.8668	.7031

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.5806	.7942	.0152	.0090	.0715	.0058

ETA M	(SIGMA)X(STANTON NO.)	$(SIGMA)X(V_B/U_A)$
1.6254	.0090	1.5219

TABLE V-F-2

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .90 PHI B = .20

ETA	PHI	LAMBDA	I_1 (ETA)	I_2 (ETA)	I_3 (ETA)	I_4 (ETA)
-5.00	.2000	10.0000	-.0100	-.0020	-.1004	.0000
-1.00	.2629	9.2922	-.0017	-.0003	-.0180	.0000
-.90	.2812	9.0861	-.0015	-.0002	-.0153	.0000
-.80	.3032	8.8395	-.0011	-.0001	-.0124	.0000
-.70	.3289	8.5502	-.0008	-.0000	-.0092	.0001
-.60	.3585	8.2174	-.0003	.0001	-.0057	.0001
-.50	.3918	7.8423	.0001	.0003	-.0019	.0001
-.40	.4286	7.4278	.0007	.0005	.0023	.0002
-.36	.4443	7.2520	.0009	.0006	.0041	.0003
-.32	.4603	7.0711	.0012	.0008	.0060	.0003
-.28	.4768	6.8855	.0015	.0009	.0079	.0003
-.24	.4937	6.6957	.0018	.0010	.0099	.0004
-.20	.5109	6.5022	.0021	.0012	.0120	.0005
-.16	.5284	6.3056	.0024	.0014	.0141	.0006
-.12	.5461	6.1064	.0028	.0016	.0164	.0006
-.08	.5640	5.9053	.0032	.0018	.0187	.0007
-.04	.5820	5.7030	.0036	.0020	.0211	.0009
.00	.6000	5.5000	.0040	.0023	.0236	.0010
.04	.6180	5.2970	.0045	.0026	.0262	.0012
.08	.6360	5.0946	.0050	.0029	.0289	.0013
.12	.6539	4.8936	.0056	.0033	.0317	.0016
.16	.6716	4.6944	.0062	.0037	.0346	.0018
.20	.6891	4.4978	.0068	.0041	.0376	.0021
.24	.7063	4.3043	.0075	.0046	.0407	.0024
.28	.7232	4.1145	.0083	.0051	.0439	.0027
.32	.7397	3.9289	.0091	.0057	.0472	.0032
.36	.7557	3.7480	.0100	.0064	.0507	.0036
.40	.7714	3.5722	.0110	.0072	.0542	.0042
.50	.8082	3.1577	.0138	.0094	.0637	.0058
.60	.8415	2.7826	.0174	.0123	.0741	.0081
.70	.8711	2.4498	.0218	.0161	.0856	.0111
.80	.8968	2.1605	.0273	.0210	.0984	.0153
.90	.9188	1.9138	.0344	.0274	.1127	.0208
1.00	.9371	1.7078	.0434	.0358	.1290	.0282
1.50	.9864	1.1525	.1461	.1356	.2646	.1211
2.00	.9981	1.0211	.4382	.4261	.5744	.3984
2.28	.9995	1.0057	.6846	.6722	.8236	.6343

ETA J	PHI J	I_1 (ETA J)	I_2 (ETA J)	I_3 (ETA J)	I_4 (ETA J)
.5485	.8248	.0154	.0107	.0686	.0068

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.6109	.0095	1.2168

TABLE V-F-3

TABLE OF ALXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .90 PHI B = .40

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.4000	10.0000	-.0203	-.0081	-.2029	.0000
-1.00	.4472	9.2922	-.0038	-.0015	-.0390	.0001
-.90	.4609	9.0862	-.0033	-.0012	-.0344	.0001
-.80	.4774	8.8395	-.0028	-.0010	-.0296	.0001
-.70	.4967	8.5502	-.0022	-.0007	-.0246	.0002
-.60	.5188	8.2174	-.0016	-.0004	-.0194	.0002
-.50	.5438	7.8423	-.0009	-.0000	-.0139	.0003
-.40	.5715	7.4278	-.0001	.0004	-.0081	.0004
-.36	.5832	7.2520	.0002	.0006	-.0057	.0005
-.32	.5953	7.0711	.0006	.0008	-.0032	.0005
-.28	.6076	6.8855	.0009	.0010	-.0007	.0006
-.24	.6203	6.6957	.0013	.0013	.0019	.0007
-.20	.6332	6.5022	.0017	.0015	.0045	.0008
-.16	.6463	6.3056	.0021	.0018	.0073	.0009
-.12	.6596	6.1064	.0026	.0021	.0100	.0010
-.08	.6730	5.9054	.0030	.0024	.0129	.0011
-.04	.6865	5.7030	.0035	.0027	.0158	.0013
.00	.7000	5.5000	.0041	.0031	.0188	.0015
.04	.7135	5.2970	.0047	.0035	.0219	.0017
.08	.7270	5.0946	.0053	.0039	.0251	.0019
.12	.7404	4.8936	.0059	.0044	.0283	.0021
.16	.7537	4.6944	.0066	.0049	.0317	.0024
.20	.7668	4.4978	.0074	.0055	.0351	.0027
.24	.7797	4.3043	.0082	.0061	.0386	.0031
.28	.7924	4.1145	.0090	.0068	.0423	.0035
.32	.8047	3.9289	.0099	.0075	.0460	.0039
.36	.8168	3.7480	.0109	.0084	.0498	.0044
.40	.8285	3.5722	.0120	.0092	.0538	.0050
.50	.8562	3.1577	.0151	.0119	.0642	.0067
.60	.8812	2.7826	.0189	.0152	.0755	.0089
.70	.9033	2.4498	.0237	.0194	.0878	.0120
.80	.9226	2.1605	.0296	.0248	.1013	.0159
.90	.9391	1.9138	.0370	.0317	.1165	.0212
1.00	.9528	1.7078	.0465	.0407	.1336	.0282
1.50	.9898	1.1525	.1527	.1447	.2739	.1129
2.00	.9986	1.0211	.4491	.4398	.5883	.3595
2.22	.9995	1.0076	.6407	.6312	.7823	.5201

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.5174	.8607	.0157	.0124	.0661	.0070

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B/U_A)
1.5951	.0101	.9133

TABLE V-F-4

TABLE OF AUXILIARY INTEGRALS (U. OF I. IBM 7094)

TOB/TOA =10.00 C_A^2 = .90 PHI B = .60

ETA	PHI	LAMBDA	I (ETA) 1	I (ETA) 2	I (ETA) 3	I (ETA) 4
-5.00	.6000	10.0000	-.0310	-.0186	-.3100	.0000
-1.00	.6315	9.2922	-.0059	-.0035	-.0608	.0001
-.90	.6406	9.0862	-.0052	-.0030	-.0542	.0001
-.80	.6516	8.8395	-.0045	-.0025	-.0475	.0002
-.70	.6644	8.5502	-.0037	-.0020	-.0406	.0002
-.60	.6792	8.2174	-.0028	-.0015	-.0335	.0003
-.50	.6959	7.8423	-.0019	-.0008	-.0263	.0004
-.40	.7143	7.4278	-.0009	-.0001	-.0188	.0005
-.36	.7221	7.2520	-.0005	.0002	-.0157	.0006
-.32	.7302	7.0711	-.0001	.0005	-.0126	.0007
-.28	.7384	6.8855	.0004	.0008	-.0095	.0007
-.24	.7469	6.6957	.0008	.0011	-.0062	.0008
-.20	.7555	6.5022	.0013	.0015	-.0030	.0009
-.16	.7642	6.3056	.0018	.0019	.0003	.0011
-.12	.7730	6.1064	.0024	.0023	.0037	.0012
-.08	.7820	5.9054	.0030	.0028	.0071	.0013
-.04	.7910	5.7030	.0036	.0032	.0106	.0015
.00	.8000	5.5000	.0042	.0037	.0141	.0016
.04	.8090	5.2970	.0049	.0043	.0177	.0018
.08	.8180	5.0946	.0056	.0049	.0214	.0020
.12	.8270	4.8936	.0063	.0055	.0251	.0023
.16	.8358	4.6944	.0071	.0061	.0290	.0025
.20	.8445	4.4978	.0080	.0069	.0329	.0028
.24	.8531	4.3043	.0089	.0076	.0369	.0032
.28	.8616	4.1145	.0098	.0085	.0409	.0035
.32	.8698	3.9289	.0109	.0093	.0451	.0039
.36	.8779	3.7480	.0120	.0103	.0493	.0044
.40	.8857	3.5722	.0132	.0114	.0537	.0049
.50	.9041	3.1577	.0166	.0144	.0651	.0064
.60	.9208	2.7826	.0207	.0182	.0773	.0083
.70	.9356	2.4498	.0258	.0229	.0905	.0109
.80	.9484	2.1605	.0321	.0288	.1050	.0142
.90	.9594	1.9139	.0400	.0364	.1210	.0186
1.00	.9685	1.7078	.0499	.0460	.1390	.0242
1.50	.9932	1.1525	.1598	.1543	.2843	.0915
2.00	.9991	1.0211	.4606	.4543	.6034	.2823
2.14	.9995	1.0112	.5804	.5740	.7250	.3588

ETA J	PHI J	I (ETA J) 1	I (ETA J) 2	I (ETA J) 3	I (ETA J) 4
.4863	.9017	.0161	.0140	.0635	.0062

ETA M	(SIGMA)X(STANTON NO.)	(SIGMA)X(V_B /U_A)
1.5757	.0108	.6093