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**Tables for the Rigid Asymmetric Rotor:  
Transformation Coefficients from Symmetric to  
Asymmetric Bases and Expectation Values of  $P_x^2$ ,  $P_x^4$ , and  $P_x^6$**

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## Foreword

The National Standard Reference Data System is a Government-wide effort to provide for the technical community of the United States effective access to the quantitative data of physical science, critically evaluated and compiled for convenience, and readily accessible through a variety of distribution channels. The System was established in 1963 by action of the President's Office of Science and Technology and the Federal Council for Science and Technology.

The responsibility to administer the System was assigned to the National Bureau of Standards and an Office of Standard Reference Data was set up at the Bureau for this purpose. Since 1963, this Office has developed systematic plans for meeting high-priority needs for reliable reference data. It has undertaken to coordinate and integrate existing data evaluation and compilation activities (primarily those under sponsorship of Federal agencies) into a comprehensive program, supplementing and expanding technical coverage when necessary, establishing and maintaining standards for the output of the participating groups, and providing mechanisms for the dissemination of the output as required.

The System now comprises a complex of data centers and other activities, carried on in Government agencies, academic institutions, and nongovernmental laboratories. The independent operational status of existing critical data projects is maintained and encouraged. Data centers that are components of the NSRDS produce compilations of critically evaluated data, critical reviews of the state of quantitative knowledge in specialized areas, and computations of useful functions derived from standard reference data. In addition, the centers and projects establish criteria for evaluation and compilation of data and make recommendations on needed modifications or extensions of experimental techniques.

Data publications of the NSRDS take a variety of physical forms, including books, pamphlets, loose-leaf sheets and computer tapes. While most of the compilations have been issued by the Government Printing Office, several have appeared in scientific journals. Under some circumstances, private publishing houses are regarded as appropriate primary dissemination mechanisms.

The technical scope of the NSRDS is indicated by the principal categories of data compilation projects now active or being planned: nuclear properties, atomic and molecular properties, solid state properties, thermodynamic and transport properties, chemical kinetics, colloid and surface properties, and mechanical properties.

An important aspect of the NSRDS is the advice and planning assistance which the National Research Council of the National Academy of Sciences-National Academy of Engineering provides. These services are organized under an overall Review Committee which considers the program as a whole and makes recommendations on policy, long-term planning, and international collaboration. Advisory Panels, each concerned with a single technical area, meet regularly to examine major portions of the program, assign relative priorities, and identify specific key problems in need of further attention. For selected specific topics, the Advisory Panels sponsor subpanels which make detailed studies of users' needs, the present state of knowledge, and existing data resources as a basis for recommending one or more data compilation activities. This assembly of advisory services contributes greatly to the guidance of NSRDS activities.

The NSRDS-NBS series of publications is intended primarily to include evaluated reference data and critical reviews of long-term interest to the scientific and technical community.

A. V. ASTIN, *Director.*

## Preface

The rigid asymmetric rotor provides the first approximation for treating the rotational energy of asymmetric molecules. It is thus of considerable importance in the interpretation of both pure-rotational spectra and the rotational fine structure in vibrational and electronic bands. The quantum mechanics of the rigid asymmetric rotor has been discussed in many places, and several tabulations of energy eigenvalues and direction-cosine matrix elements are available. For some purposes, however, it is necessary to have an explicit description of the asymmetric rotor eigenfunctions. This can be given most conveniently in terms of the transformation coefficients from a symmetric rotor basis to the asymmetric rotor basis. The first part of this volume is a tabulation of transformation coefficients for varying degrees of asymmetry.

The transformation coefficients may be used to derive expectation values and matrix elements for the asymmetric rotor from the well-known properties of the symmetric rotor. Three quantities which are of particular importance in spectral analysis are the angular-momentum expectation values  $\langle P_z^2 \rangle$ ,  $\langle P_z^4 \rangle$ , and  $\langle P_z^6 \rangle$ . Values of these quantities have been computed at the same asymmetry intervals used in the table of transformation coefficients. They are tabulated in Part II of the volume.

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# Tables for the Rigid Asymmetric Rotor: Transformation Coefficients from Symmetric to Asymmetric Bases and Expectation Values of $P_x^2$ , $P_x^4$ , and $P_x^6$

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Tables of computed quantities associated with the rigid asymmetric rotor are presented. The first group of tables gives transformation coefficients from symmetric to asymmetric rotor bases. These coefficients permit the eigenfunctions of the asymmetric rotor to be written in terms of symmetric-rotor eigenfunctions. In Part II the angular-momentum expectation values ( $P_x^2$ ), ( $P_x^4$ ), and  $P_x^6$  are tabulated. In both sets of tables values are given at intervals of 0.1 in the asymmetry parameter  $\kappa$  and for  $J \leq 15$ . The tabulated quantities find use in the analysis of microwave rotational spectra and the rotational fine structure in vibrational and electronic band spectra.

Key Words: Angular momentum, asymmetric rotor, eigenfunction, microwave spectra, rotational spectrum, and transformation coefficients.

## Description of the Tables

### I. Transformation Coefficients from Wang Symmetric to Asymmetric Rotor Bases

The matrices reproduced on the following pages contain the coefficients of the transformation from the Wang symmetric rotor basis to asymmetric rotor bases of varying degrees of asymmetry. The coefficients were computed on the CDC 3600 computer at Michigan State University, stored on magnetic tape, and prepared for duplication.

The computed transformation coefficients are the elements of a matrix  $\mathbf{T}$  where

$$\mathbf{w} = \bar{\mathbf{T}}\mathbf{H}_w\mathbf{T}.$$

Here  $\mathbf{H}_w$  is the Wang reduced energy matrix [1] for a rigid asymmetric rotator in the Wang symmetric rotor basis and  $\mathbf{w}$  is diagonal. The matrices  $\mathbf{T}$  were computed for  $2 \leq J \leq 15$  at intervals of 0.1 in the asymmetry parameter  $\kappa$ . The King, Hainer, Cross representation  $I^r$  was used [2] and the calculations were performed for  $0 \geq \kappa \geq -0.9$  using a continued fraction expansion which has been described [3]. The matrices for positive  $\kappa$  may be obtained from those for negative  $\kappa$  by interchanging  $K_{-1}$  and  $K_{+1}$  in the labeling of the eigenvectors (the columns of the matrices). In this case the representation will be  $III^l$ . To obtain the matrices for representations  $I^l$  and  $III^r$  from the corresponding matrices for  $I^r$  and  $III^l$ , the signs of the matrix elements in alternate rows must be changed.

The matrix  $\mathbf{T}$  is diagonal in  $J$  and in a symmetry symbol  $\sigma$  ( $\sigma = E^+, 0^+, 0^-,$  or  $E^-$ ) [2]. Consequently,

the table consists of a reproduction of the sub-matrices for each  $J$ ,  $\sigma$ , and  $\kappa$ . The eigenvalues of  $\mathbf{H}_w$  used to compute the entries were accurate to at least  $\pm 1 \times 10^{-7}$  and the uncertainty in the matrix elements of  $\mathbf{T}$  is believed to be no more than  $\pm 1 \times 10^{-8}$  (the elements are normalized and given to eight decimal places). For checking purposes the elements of the matrix  $\mathbf{T}\bar{\mathbf{T}}$  were computed and found to differ in every case by less than  $\pm 1 \times 10^{-8}$  from the elements of the unit matrix.

The principal application of the  $\mathbf{T}$  matrices is to express the wave functions of the asymmetric rotator as a linear combination of Wang symmetric rotor functions or to transform the matrix of an observable from the symmetric to the asymmetric rotor basis. If  $\phi$  is a row matrix of the Wang functions and  $\psi$  is a row matrix of the asymmetric rotor functions, then  $\psi = \phi\mathbf{T}$ . If  $\mathbf{A}_\phi$  is the matrix of an observable in the  $\phi$  basis and  $\mathbf{A}_\psi$  is the matrix of the same observable in the  $\psi$  basis, then

$$\mathbf{A}_\psi = \bar{\mathbf{T}}\mathbf{A}_\phi\mathbf{T}.$$

### References

- [1] S. C. Wang, Phys. Rev. **34**, 243 (1929).
- [2] G. W. King, R. M. Hainer and P. C. Cross, J. Chem. Phys. **11**, 27 (1943).
- [3] J. D. Swalen and L. Pierce, J. Math. Phys. **2**, 736 (1961).

## II. Expectation values $w(b)$ , $\langle P_z^2 \rangle$ , $\langle P_z^4 \rangle$ , and $\langle P_z^6 \rangle$ , for the Rigid Asymmetric Rotator

The computer program which was used to generate the transformation coefficients in the previous table has also been used to compute a table of  $\langle P_z^2 \rangle$ ,  $\langle P_z^4 \rangle$ , and  $\langle P_z^6 \rangle$  for asymmetric rotator molecules. These quantities are the average values of the square, fourth power, and sixth power of the molecule-fixed  $z$ -axis component of the rotational angular momentum. The calculations were performed on the CDC 3600 computer at Michigan State University.

The values of  $\langle P_z^2 \rangle$ ,  $\langle P_z^4 \rangle$ , and  $\langle P_z^6 \rangle$  have been computed for  $J \leq 15$  at intervals of 0.1 in the asymmetry parameter  $\kappa$ . The calculations were performed for  $0 \geq \kappa \geq -0.9$  using coordinate identification I<sup>r</sup> in which the  $a$  and  $z$  axes are identical [1]. The expectation values for  $0 \leq \kappa \leq 0.9$  are obtained by changing the sign of  $\kappa$  in the table, interchanging the  $K_{-1}$  and  $K_{+1}$  labels of the energy states, and identifying  $\langle P_z^n \rangle$  with  $\langle P_c^n \rangle$  (coordinate identification III<sup>l</sup> or III<sup>r</sup>). Values of the Wang reduced energy,  $w$ , have also been computed.

The values of  $w$ ,  $\langle P_z^2 \rangle$ ,  $\langle P_z^4 \rangle$ , and  $\langle P_z^6 \rangle$  are given to eight significant figures in floating decimal format and should be accurate to within  $\pm 1$  in the last figure given. (The last three digits and associated sign for each number give the exponent of 10. Thus, for example,

$$4.5808604 - 004 = 4.5808604 \times 10^{-4}.)$$

For checking purposes the expectation values were read back into the computer from the computer tape used for duplication. Sums of the values read in were then compared with theoretical values of the sums. In no case did the calculated and theoretical sums differ by more than  $\pm 1$  in the eighth significant figure. As an additional check the values of  $\langle P_z^4 \rangle$  were compared with values computed from  $\langle P_z^2 \rangle$  and  $w$  using eq (6) below and found to agree to within the significance of the comparison.

Making use of the familiar relations, [1, 2]

$$H_w = P_z^2 + b(P_y^2 - P_x^2), \quad (1)$$

$$b = (Y - X)/(2Z - X - Y), \quad (2)$$

$$\begin{aligned} \text{Representation I}^r: Z = A, X = B, Y = C, b = b_p \\ = (\kappa + 1)/(\kappa - 3) \end{aligned}$$

$$\begin{aligned} \text{Representation III}^l: Z = C, X = B, Y = A, b = b_0 \\ = (\kappa - 1)/(\kappa + 3) \end{aligned}$$

$$P^2 = P_x^2 + P_y^2 + P_z^2, \quad (3)$$

$$\langle H_w \rangle = w, \quad (4)$$

$$\langle P^2 \rangle = J(J + 1), \quad (5)$$

it may be shown that

$$2\langle P_x^2 \rangle = J(J + 1) - \langle P_z^2 \rangle - (w - \langle P_z^2 \rangle)/b,$$

$$2\langle P_y^2 \rangle = J(J + 1) - \langle P_z^2 \rangle + (w - \langle P_z^2 \rangle)/b,$$

$$\begin{aligned} 4\langle P_x^4 \rangle = (J(J + 1) - w/b)^2 - 2(1 - 1/b)(J(J + 1) \\ - w/b)\langle P_z^2 \rangle + (1 - 1/b)^2\langle P_z^4 \rangle \end{aligned}$$

$$\begin{aligned} 4\langle P_y^4 \rangle = (J(J + 1) + w/b)^2 - 2(1 + 1/b)(J(J + 1) \\ + w/b)\langle P_z^2 \rangle + (1 + 1/b)^2\langle P_z^4 \rangle. \end{aligned}$$

In addition, from an equation given by Watson [3], it may be shown that

$$\begin{aligned} \langle P_z^4 \rangle = \langle P_z^2 \rangle^2 - (f + g)(\langle P_x^2 \rangle \langle P_y^2 \rangle + \langle P_z^2 \rangle) \\ + f(\langle P_y^2 \rangle \langle P_x^2 \rangle + \langle P_x^2 \rangle) \\ + g(\langle P_x^2 \rangle \langle P_y^2 \rangle + \langle P_y^2 \rangle) \end{aligned} \quad (6)$$

where

$$f = 2b/(3b + 3),$$

$$g = 2b/(3b - 3).$$

The principal application of the  $\langle P_z^2 \rangle$  is for the evaluation of the effects of centrifugal distortion. The centrifugal distortion contribution,  $W_1$ , to the total rotational energy of an asymmetric rotator may be written to first order as follows [3]:

$$\begin{aligned} W_1 = d'_J J^2(J + 1)^2 - d'_{JK} J(J + 1)\langle P_z^2 \rangle - d'_K \langle P_z^4 \rangle \\ - d'_{wJ} wJ(J + 1) - d'_{wK} w\langle P_z^2 \rangle \end{aligned}$$

where

$$d'_J = d_J + (\bar{X} + \bar{Y})d_{wJ}/2$$

$$d'_{JK} = d_{JK} + (\bar{X} + \bar{Y})d_{wK}/2$$

$$d'_K = d_K$$

$$d'_{wJ} = (2\bar{Z} - \bar{X} - \bar{Y})d_{wJ}/2$$

$$d'_{wK} = (2\bar{Z} - \bar{X} - \bar{Y})d_{wK}/2.$$

Equations for the unprimed  $d$ 's and the effective rotational constants  $\bar{X}$ ,  $\bar{Y}$ ,  $\bar{Z}$  in terms of the  $\tau$ 's of Kivelson and Wilson may be found in the recent paper by Watson [3].

The values of  $\langle P_z^2 \rangle$  and  $\langle P_z^4 \rangle$  are also useful in evaluating higher order corrections for internal

rotation [4]. In addition, the squares find use in fitting spectra since [5]

$$\langle P_\alpha^2 \rangle = \frac{\partial W}{\partial \alpha}, \alpha = A, B, C,$$

where  $W$  is the energy of a rigid rotator.

## References

- [1] G. W. King, R. M. Hainer and P. C. Cross, *J. Chem. Phys.* **11**, 27 (1943).
- [2] S. C. Wang, *Phys. Rev.* **34**, 243 (1929).
- [3] J. K. G. Watson, *J. Chem. Phys.* **46**, 1935 (1967).
- [4] D. R. Herschbach, *J. Chem. Phys.* **31**, 91 (1959).
- [5] J. K. Bragg and S. Golden, *Phys. Rev.* **75**, 735 (1949).

TABLE I.—TRANSFORMATION COEFFICIENTS

|                  |             |             |             |  |
|------------------|-------------|-------------|-------------|--|
| KAPPA = 0.000000 |             |             |             |  |
| J = 2, E+        |             |             |             |  |
| 0.96592583       | -0.25881905 |             |             |  |
| 0.25881905       | 0.96592583  |             |             |  |
| J = 3, E+        |             |             |             |  |
| 0.89787873       | -0.44024287 |             |             |  |
| 0.44024287       | 0.89787873  |             |             |  |
| J = 3, O+        |             |             |             |  |
| 0.99202970       | -0.12600429 |             |             |  |
| 0.12600429       | 0.99202970  |             |             |  |
| J = 3, O-        |             |             |             |  |
| 0.97942806       | -0.20179364 |             |             |  |
| 0.20179364       | 0.97942806  |             |             |  |
| J = 4, E+        |             |             |             |  |
| 0.83381372       | -0.55034954 | 0.04324430  |             |  |
| 0.54966953       | 0.82041265  | -0.15743726 |             |  |
| 0.05116735       | 0.15504342  | 0.98658170  |             |  |
| J = 4, O+        |             |             |             |  |
| 0.97624358       | -0.21667597 |             |             |  |
| 0.21667597       | 0.97624358  |             |             |  |
| J = 4, O-        |             |             |             |  |
| 0.91143783       | -0.41143783 |             |             |  |
| 0.41143783       | 0.91143783  |             |             |  |
| J = 4, E-        |             |             |             |  |
| 0.98979877       | -0.14247241 |             |             |  |
| 0.14247241       | 0.98979877  |             |             |  |
| J = 5, E+        |             |             |             |  |
| 0.78475981       | -0.60715177 | 0.12457435  |             |  |
| 0.61178117       | 0.72657296  | -0.31275474 |             |  |
| 0.09937724       | 0.32164959  | 0.94162928  |             |  |
| J = 5, O+        |             |             |             |  |
| 0.95621138       | -0.29193710 | 0.02079704  |             |  |
| 0.29188419       | 0.94598434  | -0.14112851 |             |  |
| 0.02152698       | 0.14101902  | 0.98977282  |             |  |
| J = 5, O-        |             |             |             |  |
| 0.80656305       | -0.59027098 | 0.03219047  |             |  |
| 0.58815883       | 0.79582457  | -0.14398766 |             |  |
| 0.05937377       | 0.13506823  | 0.98905578  |             |  |
| J = 5, E-        |             |             |             |  |
| 0.96592583       | -0.25881905 |             |             |  |
| 0.25881905       | 0.96592583  |             |             |  |
| J = 6, E+        |             |             |             |  |
| 0.74727358       | 0.61776066  | 0.24476185  | -0.00675222 |  |
| 0.64808206       | -0.59620107 | -0.47316748 | 0.02542573  |  |
| 0.14660088       | -0.51013166 | 0.83613453  | -0.13839408 |  |
| 0.00894570       | -0.05178552 | 0.13070278  | 0.99002779  |  |
| J = 6, O+        |             |             |             |  |
| 0.93511825       | -0.35063801 | 0.05105729  |             |  |
| 0.35145568       | 0.89950338  | -0.25956228 |             |  |
| 0.04508620       | 0.26066580  | 0.96437574  |             |  |
| J = 6, O-        |             |             |             |  |
| 0.70707808       | 0.70076489  | 0.09470565  |             |  |
| 0.69541148       | -0.66480395 | -0.27283435 |             |  |
| 0.12823205       | -0.25877458 | 0.95738825  |             |  |



TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

| KAPPA = 0.000000 --CONTINUED |             |             |             |             |
|------------------------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 6, <i>E</i> --    |             |             |             |             |
| 0.93032179                   | -0.36600202 | 0.02332157  |             |             |
| 0.36559680                   | 0.92050745  | -0.13785870 |             |             |
| 0.02898888                   | 0.13677924  | 0.99017730  |             |             |
| <i>J</i> = 7, <i>E</i> +     |             |             |             |             |
| 0.71749372                   | -0.59352776 | 0.36379975  | -0.02402699 |             |
| 0.56984854                   | 0.44521464  | -0.59016328 | 0.06923984  |             |
| 0.19000003                   | 0.65817717  | 0.68219434  | -0.25556541 |             |
| 0.02014134                   | 0.12771659  | 0.23230998  | 0.96400979  |             |
| <i>J</i> = 7, <i>O</i> +     |             |             |             |             |
| 0.91465078                   | -0.39380384 | 0.09121784  | -0.00343362 |             |
| 0.39786249                   | 0.83704043  | -0.37489223 | 0.02290353  |             |
| 0.07145320                   | 0.37858346  | 0.91285778  | -0.13512838 |             |
| 0.00371858                   | 0.03092604  | 0.13351327  | 0.99055740  |             |
| <i>J</i> = 7, <i>O</i> --    |             |             |             |             |
| 0.62852847                   | 0.75028014  | 0.20495136  | -0.00515816 |             |
| 0.75129332                   | -0.51752422 | -0.40888220 | 0.02328893  |             |
| 0.20084959                   | -0.40946588 | 0.87960827  | -0.13522728 |             |
| 0.01302899                   | -0.03982555 | 0.13076532  | 0.99052744  |             |
| <i>J</i> = 7, <i>E</i> --    |             |             |             |             |
| 0.88838164                   | -0.45526960 | 0.05922544  |             |             |
| 0.45456865                   | 0.85416148  | -0.25253814 |             |             |
| 0.06438484                   | 0.25127227  | 0.96577266  |             |             |
| <i>J</i> = 8, <i>E</i> +     |             |             |             |             |
| 0.69296867                   | -0.55990468 | -0.44994324 | -0.06205720 | 0.00107967  |
| 0.68291513                   | 0.31069024  | 0.64534204  | 0.14357865  | -0.00416107 |
| 0.22860655                   | 0.73673375  | -0.51275791 | -0.37622535 | 0.02227660  |
| 0.03402956                   | 0.21677734  | -0.34232660 | 0.90385355  | -0.13308204 |
| 0.00154377                   | 0.01446701  | -0.03125000 | 0.13052707  | 0.99084532  |
| <i>J</i> = 8, <i>O</i> +     |             |             |             |             |
| 0.89545773                   | -0.42370978 | 0.13605618  | -0.01068665 |             |
| 0.43398701                   | 0.76304325  | -0.47545159 | 0.05801774  |             |
| 0.09864746                   | 0.48273561  | 0.83480291  | -0.24564022 |             |
| 0.00891133                   | 0.07212048  | 0.24194753  | 0.96756427  |             |
| <i>J</i> = 8, <i>O</i> --    |             |             |             |             |
| 0.56775286                   | 0.74289023  | 0.35417527  | -0.01818423 |             |
| 0.77715277                   | -0.34236372 | -0.52459128 | 0.06020505  |             |
| 0.26968636                   | -0.56489973 | 0.73992899  | -0.24629790 |             |
| 0.03097634                   | -0.10857938 | 0.22774757  | 0.96715150  |             |
| <i>J</i> = 8, <i>E</i> --    |             |             |             |             |
| 0.84507523                   | -0.52295022 | 0.11115804  | -0.00385026 |             |
| 0.52389257                   | 0.76848937  | -0.36669815 | 0.02220650  |             |
| 0.10653740                   | 0.36747989  | 0.91427693  | -0.13306395 |             |
| 0.00584975                   | 0.03009470  | 0.13143080  | 0.99085117  |             |
| <i>J</i> = 9, <i>E</i> +     |             |             |             |             |
| 0.67220912                   | -0.53072338 | -0.49933608 | -0.13081213 | 0.00438862  |
| 0.69050368                   | 0.20448662  | 0.64565117  | 0.25364481  | -0.01373933 |
| 0.26239919                   | 0.76332501  | -0.33022453 | -0.48610630 | 0.05598228  |
| 0.04970848                   | 0.30415717  | -0.46636843 | 0.79359067  | -0.24027447 |
| 0.00391232                   | 0.03662316  | -0.08514864 | 0.22905679  | 0.96898201  |
| <i>J</i> = 9, <i>O</i> +     |             |             |             |             |
| 0.87769149                   | -0.44346672 | 0.18005377  | -0.02398413 | 0.00056729  |
| 0.46226275                   | 0.68444885  | -0.55287273 | 0.11027403  | -0.00378261 |
| 0.12536574                   | 0.56511658  | 0.73325481  | -0.35608500 | 0.02162255  |
| 0.01593187                   | 0.12434151  | 0.35134449  | 0.91845091  | -0.13149276 |
| 0.00064057                   | 0.00703411  | 0.02840452  | 0.13006077  | 0.99107391  |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

| KAPPA = 0.000000 --CONTINUED |             |             |             |             |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| <i>J = 9, O -</i>            |             |             |             |             |             |
| 0.51955135                   | 0.69340063  | -0.49701018 | -0.04735120 | 0.00083914  |             |
| 0.78568551                   | -0.16100172 | 0.58538431  | 0.11868954  | -0.00383846 |             |
| 0.33135754                   | -0.67179521 | -0.55667077 | -0.35852887 | 0.02163522  |             |
| 0.05440732                   | -0.20439785 | -0.31574027 | 0.91557536  | -0.13149604 |             |
| 0.00258830                   | -0.01366492 | -0.02705237 | 0.12980551  | 0.99107279  |             |
| <i>J = 9, E -</i>            |             |             |             |             |             |
| 0.80333137                   | -0.56909591 | 0.17504583  | -0.01214584 |             |             |
| 0.57572528                   | 0.66708428  | -0.46952787 | 0.05552068  |             |             |
| 0.15160622                   | 0.47527219  | 0.83274632  | -0.24013636 |             |             |
| 0.01465176                   | 0.07242069  | 0.23544874  | 0.96907402  |             |             |
| <i>J = 10, E +</i>           |             |             |             |             |             |
| 0.65427064                   | -0.50759368 | -0.51237580 | -0.22711767 | 0.01292872  | -0.00017537 |
| 0.69450976                   | 0.12191611  | 0.59468763  | 0.38470298  | -0.03379971 | 0.00068675  |
| 0.29176088                   | 0.75928778  | -0.13016935 | -0.55670542 | 0.10714086  | -0.00367514 |
| 0.06638878                   | 0.38269382  | -0.58036029 | 0.62544995  | -0.34739623 | 0.02116908  |
| 0.00735960                   | 0.06709570  | -0.17299499 | 0.31410156  | 0.92189345  | -0.13026667 |
| 0.00026569                   | 0.00328557  | -0.01132559 | 0.02555044  | 0.12899452  | 0.99124591  |
| <i>J = 10, O +</i>           |             |             |             |             |             |
| 0.86130557                   | -0.45615507 | 0.21933252  | -0.04431909 | 0.00208130  |             |
| 0.48455360                   | 0.60721825  | -0.60386861 | 0.17803710  | -0.01180292 |             |
| 0.15085816                   | 0.62417037  | 0.61274107  | -0.45755623 | 0.05332767  |             |
| 0.02448323                   | 0.18243088  | 0.45498108  | 0.83873551  | -0.23586968 |             |
| 0.00170725                   | 0.01840843  | 0.06911263  | 0.23130855  | 0.97024637  |             |
| <i>J = 10, O -</i>           |             |             |             |             |             |
| 0.48022542                   | -0.63341016 | 0.59781044  | -0.10385762 | 0.00337470  |             |
| 0.78396650                   | 0.00741970  | -0.58663543 | 0.20261578  | -0.01213242 |             |
| 0.38477744                   | 0.70979497  | 0.36229471  | -0.46262944 | 0.05342262  |             |
| 0.08173077                   | 0.30580459  | 0.40312664  | 0.82561776  | -0.23589796 |             |
| 0.00681810                   | 0.03756562  | 0.06865126  | 0.22910642  | 0.97022657  |             |
| <i>J = 10, E -</i>           |             |             |             |             |             |
| 0.76440999                   | 0.59637746  | 0.24336590  | -0.02799874 | 0.00063837  |             |
| 0.61340556                   | -0.55680339 | -0.55013311 | 0.10508918  | -0.00366514 |             |
| 0.19666129                   | -0.56350715 | 0.72322975  | -0.34680646 | 0.02116680  |             |
| 0.02709319                   | -0.12926283 | 0.33815212  | 0.92262721  | -0.13026608 |             |
| 0.00113682                   | -0.00739715 | 0.02680426  | 0.12906063  | 0.99124612  |             |
| <i>J = 11, E +</i>           |             |             |             |             |             |
| 0.63852113                   | -0.48906214 | 0.49686009  | 0.32439125  | 0.03176041  | -0.00079165 |
| 0.69610651                   | 0.05663204  | -0.50927668 | -0.49780893 | -0.07102981 | 0.00261532  |
| 0.31720658                   | 0.73799407  | -0.06151950 | 0.56505344  | 0.17761388  | -0.01131396 |
| 0.08346058                   | 0.44957680  | 0.63993482  | -0.42273939 | -0.44724255 | 0.05161370  |
| 0.01184333                   | 0.10380445  | 0.28156398  | -0.38116822 | 0.84288158  | -0.23252425 |
| 0.00074134                   | 0.00900693  | 0.03446458  | -0.06060852 | 0.22786860  | 0.97115036  |
| <i>J = 11, O +</i>           |             |             |             |             |             |
| 0.84618578                   | -0.46415651 | -0.25191893 | -0.07095741 | 0.00549971  | -0.00009404 |
| 0.50224641                   | 0.53481201  | 0.62915820  | 0.25523600  | -0.02718104 | 0.00062893  |
| 0.17474584                   | 0.66249776  | -0.47969564 | -0.53891950 | 0.10002889  | -0.00356332 |
| 0.03421604                   | 0.24163695  | -0.54279904 | 0.72816792  | -0.33933544 | 0.02080824  |
| 0.00336338                   | 0.03522546  | -0.12611998 | 0.32939828  | 0.92607997  | -0.12928364 |
| 0.00011017                   | 0.00151982  | -0.00720131 | 0.02556669  | 0.12826733  | 0.99138270  |
| <i>J = 11, O -</i>           |             |             |             |             |             |
| 0.44738231                   | -0.58068592 | 0.65062819  | -0.19808474 | 0.00991492  | -0.00013784 |
| 0.77609117                   | -0.11031040 | -0.53737435 | 0.30972139  | -0.02855131 | 0.00063753  |
| 0.43006332                   | 0.69785347  | 0.16107058  | -0.54035912 | 0.10050698  | -0.00356511 |
| 0.11136476                   | 0.39795821  | 0.49268217  | 0.68616140  | -0.33947160 | 0.02080865  |
| 0.01321936                   | 0.07247295  | 0.13840599  | 0.31844447  | 0.92590255  | -0.12928375 |
| 0.00049608                   | 0.00359781  | 0.00872327  | 0.02495545  | 0.12825117  | 0.99138266  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = 0.000000—CONTINUED |             |             |             |             |             |             |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 11, <i>E</i> —  |             |             |             |             |             |             |
| 0.72865224                 | −0.60916635 | −0.30835317 | −0.05380574 | 0.00235196  |             |             |
| 0.64009539                 | 0.44588473  | 0.60184376  | 0.17065252  | −0.01124724 |             |             |
| 0.23981142                 | 0.62570586  | −0.59124021 | −0.44582023 | 0.05159455  |             |             |
| 0.04271364                 | 0.19541725  | −0.43464981 | 0.84675989  | −0.23251857 |             |             |
| 0.00313472                 | 0.02018509  | −0.06493824 | 0.22852719  | 0.97115451  |             |             |
| <i>J</i> = 12, <i>E</i> +  |             |             |             |             |             |             |
| 0.62451719                 | −0.47375508 | 0.47139717  | −0.39829147 | 0.06838405  | −0.00257708 | 0.00002877  |
| 0.69604940                 | 0.00396958  | −0.41970797 | 0.56691499  | −0.13378556 | 0.00731468  | −0.00011397 |
| 0.33925882                 | 0.70718403  | −0.21426924 | −0.51688730 | 0.26652922  | −0.02592703 | 0.00061181  |
| 0.10048319                 | 0.50424073  | 0.63352913  | 0.21640585  | −0.52747102 | 0.09599985  | −0.00348157 |
| 0.01725611                 | 0.14438663  | 0.38633739  | 0.43914575  | 0.72468669  | −0.33340259 | 0.02052023  |
| 0.00152359                 | 0.01801148  | 0.07134651  | 0.11432843  | 0.31999031  | 0.92876864  | −0.12847946 |
| 0.00004568                 | 0.00069414  | 0.00354435  | 0.00688176  | 0.02443257  | 0.12760566  | 0.99149354  |
| <i>J</i> = 12, <i>O</i> +  |             |             |             |             |             |             |
| 0.83220318                 | −0.46906842 | −0.27744559 | −0.10145192 | 0.01199956  | −0.00039073 |             |
| 0.51636954                 | 0.46861590  | 0.63256378  | 0.33292149  | −0.05275186 | 0.00228553  |             |
| 0.19688013                 | 0.68410166  | −0.34290443 | −0.59103434 | 0.16193285  | −0.01076345 |             |
| 0.04479522                 | 0.29851431  | −0.60550500 | 0.59141679  | −0.43583178 | 0.05023079  |             |
| 0.00564588                 | 0.05700240  | −0.19558371 | 0.41954775  | 0.85418030  | −0.22982940 |             |
| 0.00032061                 | 0.00433720  | −0.02035339 | 0.06127865  | 0.22644572  | 0.97187144  |             |
| <i>J</i> = 12, <i>O</i> −  |             |             |             |             |             |             |
| 0.41944340                 | −0.53758541 | 0.65552600  | 0.32365893  | 0.02448126  | −0.00061587 |             |
| 0.76452985                 | −0.19895292 | −0.44269401 | −0.42028041 | −0.05738263 | 0.00233819  |             |
| 0.46789626                 | 0.65742607  | −0.04560389 | 0.56554961  | 0.16377370  | −0.01077674 |             |
| 0.14197879                 | 0.47502729  | 0.56053380  | −0.49718704 | −0.43620463 | 0.05023459  |             |
| 0.02178127                 | 0.11598928  | 0.23919396  | −0.38499401 | 0.85312124  | −0.22983052 |             |
| 0.00142699                 | 0.01030394  | 0.02856682  | −0.05785810 | 0.22626475  | 0.97187058  |             |
| <i>J</i> = 12, <i>E</i> −  |             |             |             |             |             |             |
| 0.69598362                 | −0.61203979 | −0.36441663 | −0.09041562 | 0.00629373  | −0.00010623 |             |
| 0.65838658                 | 0.34082907  | 0.62297148  | 0.24821899  | −0.02561525 | 0.00061028  |             |
| 0.27998340                 | 0.66152159  | −0.44388243 | −0.52702888 | 0.09589222  | −0.00348125 |             |
| 0.06085125                 | 0.26463111  | −0.51748363 | 0.73954047  | −0.33337219 | 0.02052015  |             |
| 0.00634662                 | 0.03999167  | −0.11933472 | 0.32392114  | 0.92880985  | −0.12847944 |             |
| 0.00021539                 | 0.00175265  | −0.00673467 | 0.02465564  | 0.12760945  | 0.99149355  |             |
| <i>J</i> = 13, <i>E</i> +  |             |             |             |             |             |             |
| 0.61193586                 | −0.46075506 | 0.44793807  | −0.44228056 | −0.13011529 | −0.00697525 | 0.00014166  |
| 0.69484077                 | −0.03924641 | −0.34187556 | 0.58875105  | 0.22770653  | 0.01728635  | −0.00048595 |
| 0.35839687                 | 0.67143790  | −0.32417671 | −0.42358927 | −0.36555676 | −0.05067420 | 0.00218969  |
| 0.11715378                 | 0.54732238  | 0.58211680  | 0.01166099  | 0.56890078  | 0.15479498  | −0.01037709 |
| 0.02346020                 | 0.18666954  | 0.47347169  | 0.48951465  | −0.56164999 | −0.42771331 | 0.04913943  |
| 0.00265913                 | 0.03039896  | 0.11929811  | 0.19511817  | −0.39403058 | 0.86005333  | −0.22762660 |
| 0.00013818                 | 0.00205908  | 0.01070515  | 0.02237329  | −0.05682515 | 0.22470596  | 0.97244985  |
| <i>J</i> = 13, <i>O</i> +  |             |             |             |             |             |             |
| 0.81923408                 | −0.47190592 | 0.29671994  | 0.13266003  | 0.02274985  | −0.00116716 | 0.00001564  |
| 0.52769060                 | 0.40882842  | −0.61982542 | −0.40247719 | −0.09051880 | 0.00607094  | −0.00010499 |
| 0.21724798                 | 0.69287609  | 0.21139590  | 0.60955009  | 0.23643262  | −0.02420242 | 0.00059354  |
| 0.05592764                 | 0.35092530  | 0.63874614  | −0.43634057 | −0.51647471 | 0.09260685  | −0.00341486 |
| 0.00854962                 | 0.08280513  | 0.27082605  | −0.49584673 | 0.75199879  | −0.32855118 | 0.02028386  |
| 0.00068511                 | 0.00902735  | 0.04169831  | −0.11209987 | 0.32025884  | 0.93097370  | −0.12780905 |
| 0.00001893                 | 0.00031424  | 0.00183753  | −0.00621818 | 0.02396633  | 0.12705152  | 0.99158529  |
| <i>J</i> = 13, <i>O</i> −  |             |             |             |             |             |             |
| 0.39532384                 | −0.50214425 | 0.62346667  | 0.44719034  | 0.05363152  | −0.00199573 | 0.00002279  |
| 0.75081740                 | −0.26618804 | −0.32242019 | −0.50063816 | −0.10384662 | 0.00629932  | −0.00010636 |
| 0.49916287                 | 0.60216141  | −0.22951542 | 0.52574744  | 0.24199362  | −0.02427130 | 0.00059381  |
| 0.17255391                 | 0.53543578  | 0.57139785  | −0.28557001 | −0.51661968 | 0.09263043  | −0.00341492 |
| 0.03232357                 | 0.16507906  | 0.35212063  | −0.42522837 | 0.74735155  | −0.32855778 | 0.02028388  |
| 0.00300682                 | 0.02129434  | 0.06451924  | −0.10279827 | 0.31902568  | 0.93096442  | −0.12780906 |
| 0.00009313                 | 0.00083422  | 0.00316951  | −0.00591386 | 0.02389608  | 0.12705066  | 0.99158529  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = 0.000000 --CONTINUED |             |             |             |             |             |             |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J = 13, E -</i>           |             |             |             |             |             |             |             |
| 0.66616906                   | -0.60864734 | -0.40871806 | -0.13608744 | 0.01402732  | -0.00044139 |             |             |
| 0.67029193                   | 0.24515890  | 0.61587202  | 0.32992884  | -0.04949449 | 0.00217931  |             |             |
| 0.31666846                   | 0.67455051  | -0.28984679 | -0.58031496 | 0.15433223  | -0.01037448 |             |             |
| 0.08080599                   | 0.33162888  | -0.57784351 | 0.60358571  | -0.42762044 | 0.04913869  |             |             |
| 0.01088948                   | 0.06650256  | -0.18803641 | 0.41003093  | 0.86032668  | -0.22762638 |             |             |
| 0.00064432                   | 0.00517982  | -0.01947366 | 0.05848619  | 0.22475287  | 0.97245002  |             |             |
| <i>J = 14, E +</i>           |             |             |             |             |             |             |             |
| 0.60053473                   | -0.44947334 | 0.42896477  | -0.45530438 | -0.21387469 | -0.01662153 | 0.00050135  | -0.00000475 |
| 0.69282347                   | -0.07521147 | -0.27725003 | 0.56457378  | 0.34262743  | 0.03649537  | -0.00150872 | 0.00001899  |
| 0.37504062                   | 0.63352687  | -0.40043411 | -0.29254023 | -0.45177332 | -0.08904305 | 0.00575961  | -0.00010233 |
| 0.13327430                   | 0.58003548  | 0.50707783  | -0.18565841 | 0.54984153  | 0.22658654  | -0.02307214 | 0.00057971  |
| 0.03030937                   | 0.22888350  | 0.53910564  | 0.51005967  | -0.36081384 | -0.50754677 | 0.08997935  | -0.00336027 |
| 0.00417371                   | 0.04595675  | 0.17459418  | 0.30141865  | -0.43632138 | 0.76183840  | -0.32458691 | 0.02008660  |
| 0.00030616                   | 0.00444933  | 0.02296542  | 0.05371045  | -0.09922747 | 0.31713206  | 0.93271572  | -0.12724165 |
| 0.00000785                   | 0.00014118  | 0.00090663  | 0.00257999  | -0.00549238 | 0.02339801  | 0.12657178  | 0.99166247  |
| <i>J = 14, O +</i>           |             |             |             |             |             |             |             |
| 0.80716680                   | -0.47331476 | 0.31107988  | 0.16186605  | 0.03840927  | -0.00288227 | 0.00007183  |             |
| 0.53678855                   | 0.35509979  | -0.59676812 | -0.45797379 | -0.14038136 | 0.01352395  | -0.00042998 |             |
| 0.23591212                   | 0.69208572  | 0.09165522  | 0.59504639  | 0.31737993  | -0.04634203 | 0.00208530  |             |
| 0.06737046                   | 0.39774905  | 0.64391888  | -0.27216308 | -0.57140420 | 0.14815079  | -0.01006177 |             |
| 0.01204020                   | 0.11152859  | 0.34488608  | -0.55146318 | 0.62040220  | -0.42087022 | 0.04824642  |             |
| 0.00123974                   | 0.01583589  | 0.07132218  | -0.17738743 | 0.40435494  | 0.86528082  | -0.22578911 |             |
| 0.00005938                   | 0.00096642  | 0.00562545  | -0.01812457 | 0.05641996  | 0.22331575  | 0.97292640  |             |
| <i>J = 14, O -</i>           |             |             |             |             |             |             |             |
| 0.37424884                   | -0.47234953 | 0.57887871  | 0.53882097  | 0.10661111  | -0.00540308 | 0.00011114  |             |
| 0.73592683                   | -0.31767924 | -0.20628337 | -0.53361485 | -0.17317119 | 0.01433560  | -0.00043869 |             |
| 0.52477047                   | 0.54007608  | -0.36442455 | 0.43468594  | 0.33014832  | -0.04663029 | 0.00208732  |             |
| 0.20236168                   | 0.57961629  | 0.52222398  | -0.07973668 | -0.56739389 | 0.14826262  | -0.01006228 |             |
| 0.04456948                   | 0.21671043  | 0.45117082  | -0.44960390 | 0.60487452  | -0.42089245 | 0.04824656  |             |
| 0.00535603                   | 0.03686010  | 0.11472910  | -0.16477130 | 0.39840385  | 0.86521323  | -0.22578915 |             |
| 0.00028893                   | 0.00255432  | 0.01027596  | -0.01800277 | 0.05579655  | 0.22330411  | 0.97292637  |             |
| <i>J = 14, E -</i>           |             |             |             |             |             |             |             |
| 0.63892804                   | -0.60146974 | 0.44092593  | 0.18664398  | 0.02741707  | -0.00132595 | 0.00001773  |             |
| 0.67734382                   | 0.16001334  | -0.58605758 | -0.40600408 | -0.08523882 | 0.00570985  | -0.00010209 |             |
| 0.34971906                   | 0.66969002  | 0.13919168  | 0.59889370  | 0.22501534  | -0.02305727 | 0.00057966  |             |
| 0.10192794                   | 0.39280722  | 0.60879684  | -0.44610961 | -0.50750284 | 0.08997430  | -0.00336026 |             |
| 0.01678081                   | 0.09861264  | 0.26537858  | -0.48100355 | 0.76318053  | -0.32458551 | 0.02008659  |             |
| 0.00140885                   | 0.01109236  | 0.04103498  | -0.10601693 | 0.31748806  | 0.93271776  | -0.12724165 |             |
| 0.00004013                   | 0.00039263  | 0.00180323  | -0.00576709 | 0.02341829  | 0.12657197  | 0.99166247  |             |
| <i>J = 15, E +</i>           |             |             |             |             |             |             |             |
| 0.59012725                   | -0.43952044 | 0.41373052  | -0.44358241 | 0.29890193  | -0.03589972 | 0.00147080  | -0.00002520 |
| 0.69023657                   | -0.10549156 | -0.22333839 | 0.50710918  | -0.44763525 | 0.07079891  | -0.00392848 | 0.00008888  |
| 0.38954975                   | 0.59513957  | -0.45220030 | -0.14653939 | 0.49707014  | -0.14442440 | 0.01279379  | -0.00041260 |
| 0.14872327                   | 0.60379034  | 0.42188915  | -0.34696554 | -0.46753586 | 0.30729609  | -0.04379923 | 0.00200851  |
| 0.03766232                   | 0.26971008  | 0.58337197  | 0.47476978  | 0.15103448  | -0.56276009 | 0.14318632  | -0.00980647 |
| 0.00607496                   | 0.06426700  | 0.23338812  | 0.41000840  | 0.44591001  | 0.63223333  | -0.41526448 | 0.04750415  |
| 0.00057300                   | 0.00809035  | 0.04086990  | 0.10305251  | 0.15072483  | 0.39875618  | 0.86927493  | -0.22423354 |
| 0.00002545                   | 0.00044920  | 0.00287124  | 0.00910971  | 0.01570652  | 0.05463550  | 0.22206877  | 0.97332538  |
| <i>J = 15, O +</i>           |             |             |             |             |             |             |             |
| 0.79590296                   | -0.47371660 | 0.32182124  | -0.18731895 | -0.05860987 | -0.00621184 | 0.00023669  | -0.00000261 |
| 0.54410514                   | 0.30687570  | -0.56797110 | 0.49677770  | 0.19921627  | 0.02662520  | -0.00127888 | 0.00001758  |
| 0.25297432                   | 0.68430227  | -0.01324610 | -0.55203147 | -0.39557085 | -0.07946610 | 0.00538727  | -0.00009939 |
| 0.07892994                   | 0.43856839  | 0.62593573  | 0.10913320  | 0.59234892  | 0.21530110  | -0.02213850 | 0.00056819  |
| 0.01606466                   | 0.14207926  | 0.41234162  | 0.57949664  | -0.46482898 | -0.49992280 | 0.08782752  | -0.00331461 |
| 0.00201213                   | 0.02483667  | 0.10811655  | 0.25326526  | -0.47238034 | 0.77252367  | -0.32126908 | 0.01991942  |
| 0.00013608                   | 0.00216254  | 0.01240672  | 0.03888733  | -0.10141882 | 0.31518259  | 0.93415011  | -0.12675518 |
| 0.00000325                   | 0.00006303  | 0.00044327  | 0.00169299  | -0.00541084 | 0.02296500  | 0.12615563  | 0.99172830  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

|                                   |             |             |             |             |             |             |             |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>KAPPA</i> = 0.000000—CONTINUED |             |             |             |             |             |             |             |
| <i>J</i> = 15, <i>O</i> —         |             |             |             |             |             |             |             |
| 0.35564705                        | —0.44677753 | 0.53759916  | 0.58990852  | —0.19165756 | —0.01293495 | 0.00039125  | —0.00000379 |
| 0.72048297                        | —0.35738410 | —0.10805196 | —0.51948902 | 0.26605687  | 0.02913458  | —0.00131824 | 0.00001780  |
| 0.54556176                        | 0.47591929  | —0.45095476 | 0.30580269  | —0.41530637 | —0.08049342 | 0.00539788  | —0.00009943 |
| 0.23091357                        | 0.60905675  | 0.43588012  | 0.11494139  | 0.57052556  | 0.21572159  | —0.02214164 | 0.00056820  |
| 0.05820020                        | 0.26824758  | 0.52442043  | —0.45914921 | —0.42563049 | —0.49993502 | 0.08782858  | —0.00331461 |
| 0.00854782                        | 0.05681782  | 0.17438140  | —0.25052582 | —0.45131817 | 0.77215784  | —0.32126937 | 0.01991942  |
| 0.00065395                        | 0.00566420  | 0.02310310  | —0.04274493 | —0.09810779 | 0.31508567  | 0.93414968  | —0.12675518 |
| 0.00601724                        | 0.00018276  | 0.00091211  | —0.00198959 | —0.00527100 | 0.02295949  | 0.12615559  | 0.99172836  |
| <i>J</i> = 15, <i>E</i> —         |             |             |             |             |             |             |             |
| 0.61398317                        | —0.59207237 | 0.46257992  | 0.23699157  | 0.04815398  | —0.00331160 | 0.00008126  |             |
| 0.68070261                        | 0.08517450  | —0.54075701 | —0.46786698 | —0.13383835 | 0.01259906  | —0.00041092 |             |
| 0.37920494                        | 0.65161590  | 0.00107938  | 0.58118269  | 0.30316563  | —0.04373111 | 0.00200812  |             |
| 0.12365802                        | 0.44611382  | 0.60850882  | —0.27698207 | —0.56400187 | 0.14316014  | —0.00980637 |             |
| 0.02396163                        | 0.13482167  | 0.34362998  | —0.53129861 | 0.63733211  | —0.41525933 | 0.04750412  |             |
| 0.00259855                        | 0.01990872  | 0.07213432  | —0.16698632 | 0.40070119  | 0.86929108  | —0.22423353 |             |
| 0.00012881                        | 0.00124210  | 0.00570867  | —0.01674655 | 0.05483904  | 0.22207155  | 0.97332539  |             |
| <i>KAPPA</i> = —0.100000          |             |             |             |             |             |             |             |
| <i>J</i> = 2, <i>E</i> +          |             |             |             |             |             |             |             |
| 0.97298642                        | —0.23086235 |             |             |             |             |             |             |
| 0.23086235                        | 0.97298642  |             |             |             |             |             |             |
| <i>J</i> = 3, <i>E</i> +          |             |             |             |             |             |             |             |
| 0.91229299                        | —0.40953814 |             |             |             |             |             |             |
| 0.40953814                        | 0.91229299  |             |             |             |             |             |             |
| <i>J</i> = 3, <i>O</i> +          |             |             |             |             |             |             |             |
| 0.99357337                        | —0.11318995 |             |             |             |             |             |             |
| 0.11318995                        | 0.99357337  |             |             |             |             |             |             |
| <i>J</i> = 3, <i>O</i> —          |             |             |             |             |             |             |             |
| 0.98516052                        | —0.17163550 |             |             |             |             |             |             |
| 0.17163550                        | 0.98516052  |             |             |             |             |             |             |
| <i>J</i> = 4, <i>E</i> +          |             |             |             |             |             |             |             |
| 0.84920211                        | —0.52707128 | 0.03242903  |             |             |             |             |             |
| 0.52623972                        | 0.83955909  | —0.13495297 |             |             |             |             |             |
| 0.04390374                        | 0.13166779  | 0.99032119  |             |             |             |             |             |
| <i>J</i> = 4, <i>O</i> +          |             |             |             |             |             |             |             |
| 0.98007494                        | —0.19862808 |             |             |             |             |             |             |
| 0.19862808                        | 0.98007494  |             |             |             |             |             |             |
| <i>J</i> = 4, <i>O</i> —          |             |             |             |             |             |             |             |
| 0.93320063                        | —0.35935580 |             |             |             |             |             |             |
| 0.35935580                        | 0.93320063  |             |             |             |             |             |             |
| <i>J</i> = 4, <i>E</i> —          |             |             |             |             |             |             |             |
| 0.99215674                        | —0.12500000 |             |             |             |             |             |             |
| 0.12500000                        | 0.99215674  |             |             |             |             |             |             |
| <i>J</i> = 5, <i>E</i> +          |             |             |             |             |             |             |             |
| 0.79883549                        | —0.59399507 | 0.09503536  |             |             |             |             |             |
| 0.59509662                        | 0.75726347  | —0.26909488 |             |             |             |             |             |
| 0.08787423                        | 0.27151775  | 0.95841339  |             |             |             |             |             |
| <i>J</i> = 5, <i>O</i> +          |             |             |             |             |             |             |             |
| 0.96202453                        | —0.27248477 | 0.01615124  |             |             |             |             |             |
| 0.27236690                        | 0.95433336  | —0.12273590 |             |             |             |             |             |
| 0.01802999                        | 0.12247401  | 0.99230793  |             |             |             |             |             |
| <i>J</i> = 5, <i>O</i> —          |             |             |             |             |             |             |             |
| 0.84137178                        | —0.53994423 | 0.02353205  |             |             |             |             |             |
| 0.53836151                        | 0.83348479  | —0.12437845 |             |             |             |             |             |
| 0.04754382                        | 0.11731727  | 0.99195577  |             |             |             |             |             |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

| KAPPA = -0.100000 --CONTINUED |             |             |             |             |
|-------------------------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 5, <i>E</i> -      |             |             |             |             |
| 0.97298642                    | -0.23086235 |             |             |             |
| 0.23086235                    | 0.97298642  |             |             |             |
| <i>J</i> = 6, <i>E</i> +      |             |             |             |             |
| 0.75999919                    | -0.61962526 | 0.19607820  | -0.00437081 |             |
| 0.63624238                    | 0.64779005  | -0.41857908 | 0.01884802  |             |
| 0.13245449                    | 0.44155062  | 0.87927564  | -0.11984661 |             |
| 0.00725780                    | 0.03828367  | 0.11497498  | 0.99260387  |             |
| <i>J</i> = 6, <i>O</i> +      |             |             |             |             |
| 0.94228076                    | -0.33235423 | 0.04059097  |             |             |
| 0.33257869                    | 0.91504367  | -0.22822468 |             |             |
| 0.03870893                    | 0.22855142  | 0.97276198  |             |             |
| <i>J</i> = 6, <i>O</i> -      |             |             |             |             |
| 0.74281769                    | -0.66590884 | 0.06919022  |             |             |
| 0.66071614                    | 0.71247323  | -0.23629660 |             |             |
| 0.10805582                    | 0.22124038  | 0.96921444  |             |             |
| <i>J</i> = 6, <i>E</i> -      |             |             |             |             |
| 0.94274932                    | -0.33303377 | 0.01766993  |             |             |
| 0.33268760                    | 0.93542472  | -0.11958075 |             |             |
| 0.02329553                    | 0.11861324  | 0.99266722  |             |             |
| <i>J</i> = 7, <i>E</i> +      |             |             |             |             |
| 0.72919708                    | 0.60849051  | 0.31267743  | -0.01561224 |             |
| 0.66147651                    | -0.51010859 | -0.54737348 | 0.05118907  |             |
| 0.17446964                    | -0.59955012 | 0.74878079  | -0.22232257 |             |
| 0.01675656                    | -0.10034032 | 0.20479850  | 0.97350327  |             |
| <i>J</i> = 7, <i>O</i> +      |             |             |             |             |
| 0.92264711                    | -0.37833442 | 0.07469997  | -0.00229948 |             |
| 0.38051714                    | 0.86164920  | -0.33536718 | 0.01721093  |             |
| 0.06261343                    | 0.33741391  | 0.93193957  | -0.11713261 |             |
| 0.00292722                    | 0.02399120  | 0.11591982  | 0.99296447  |             |
| <i>J</i> = 7, <i>O</i> -      |             |             |             |             |
| 0.66037311                    | 0.73537631  | 0.15204728  | -0.00326450 |             |
| 0.73010150                    | -0.58140916 | -0.35862586 | 0.01739747  |             |
| 0.17537856                    | -0.34696104 | 0.91385470  | -0.11717507 |             |
| 0.01007486                    | -0.02833920 | 0.11462423  | 0.99295351  |             |
| <i>J</i> = 7, <i>E</i> -      |             |             |             |             |
| 0.90513933                    | -0.42266938 | 0.04553459  |             |             |
| 0.42176625                    | 0.87942509  | -0.22073683 |             |             |
| 0.05325444                    | 0.21900254  | 0.97426991  |             |             |
| <i>J</i> = 8, <i>E</i> +      |             |             |             |             |
| 0.70391768                    | -0.57857866 | -0.40998752 | -0.04070016 | 0.00060447  |
| 0.67710731                    | 0.37327510  | 0.62522784  | 0.10618104  | -0.00266974 |
| 0.21257622                    | 0.70232581  | -0.59331554 | -0.33052727 | 0.01667922  |
| 0.02890573                    | 0.18038981  | -0.29742954 | 0.92997792  | -0.11532874 |
| 0.00117830                    | 0.01050779  | -0.02264346 | 0.11385025  | 0.99318356  |
| <i>J</i> = 8, <i>O</i> +      |             |             |             |             |
| 0.90395629                    | -0.41178327 | 0.11508486  | -0.00728335 |             |
| 0.41843137                    | 0.79631553  | -0.43458290 | 0.04398273  |             |
| 0.08790090                    | 0.43932924  | 0.86796288  | -0.21425147 |             |
| 0.00718719                    | 0.05749735  | 0.21102991  | 0.97576062  |             |
| <i>J</i> = 8, <i>O</i> -      |             |             |             |             |
| 0.59561102                    | 0.75420446  | 0.27620845  | -0.01149081 |             |
| 0.76569825                    | -0.42940467 | -0.47674777 | 0.04504871  |             |
| 0.24153642                    | -0.49043232 | 0.80938564  | -0.21454880 |             |
| 0.02477606                    | -0.07914169 | 0.20326178  | 0.97560616  |             |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.100000 —CONTINUED |             |             |             |             |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 8, <i>E</i> —     |             |             |             |             |             |
| 0.86459947                   | -0.49479827 | 0.08738463  | -0.00251938 |             |             |
| 0.49423320                   | 0.80613718  | -0.32496027 | 0.01664989  |             |             |
| 0.09045354                   | 0.32372334  | 0.93473108  | -0.11532202 |             |             |
| 0.00441067                   | 0.02281926  | 0.11420404  | 0.99318541  |             |             |
| <i>J</i> = 9, <i>E</i> +     |             |             |             |             |             |
| 0.68258317                   | -0.54796084 | -0.47542698 | -0.08821701 | 0.00246583  |             |
| 0.68665168                   | 0.25894608  | 0.65201549  | 0.19040647  | -0.00880763 |             |
| 0.24644343                   | 0.74988760  | -0.42916114 | -0.43701711 | 0.04208311  |             |
| 0.04296478                   | 0.26376871  | -0.40126655 | 0.85072997  | -0.20934127 |             |
| 0.00305851                   | 0.02793749  | -0.06042231 | 0.20307067  | 0.97689385  |             |
| <i>J</i> = 9, <i>O</i> +     |             |             |             |             |             |
| 0.88649247                   | -0.43492783 | 0.15712535  | -0.01674516 | 0.00032801  |             |
| 0.44847831                   | 0.72399801  | -0.51719318 | 0.08484847  | -0.00245671 |             |
| 0.11325177                   | 0.52556622  | 0.78231168  | -0.31413385 | 0.01620340  |             |
| 0.01311923                   | 0.10207405  | 0.30879801  | 0.93865183  | -0.11395307 |             |
| 0.00047407                   | 0.06507072  | 0.02133208  | 0.11301770  | 0.99335090  |             |
| <i>J</i> = 9, <i>O</i> —     |             |             |             |             |             |
| 0.54425825                   | 0.72657317  | 0.41830396  | -0.02993270 | 0.00045959  |             |
| 0.78118953                   | -0.25834213 | -0.56130997 | 0.08903497  | -0.00248007 |             |
| 0.30252639                   | -0.61654434 | 0.65470355  | -0.31535920 | 0.01620798  |             |
| 0.04472224                   | -0.15855865 | 0.28443271  | 0.93753484  | -0.11395412 |             |
| 0.00189279                   | -0.00911069 | 0.02035185  | 0.11293280  | 0.99335059  |             |
| <i>J</i> = 9, <i>E</i> —     |             |             |             |             |             |
| 0.82434279                   | -0.54800586 | 0.14171797  | -0.00803498 |             |             |
| 0.55045587                   | 0.71761241  | -0.42458932 | 0.04188880  |             |             |
| 0.13163531                   | 0.42612744  | 0.87022202  | -0.20928733 |             |             |
| 0.01137781                   | 0.05601251  | 0.20579982  | 0.97692353  |             |             |
| <i>J</i> = 10, <i>E</i> +    |             |             |             |             |             |
| 0.66418885                   | -0.52254668 | -0.50891448 | -0.16355710 | 0.00729794  | -0.00008491 |
| 0.69218758                   | 0.16858021  | 0.63258845  | 0.30301827  | -0.02164949 | 0.00038120  |
| 0.27623227                   | 0.76081981  | -0.25088579 | -0.52472605 | 0.08100731  | -0.00237935 |
| 0.05822983                   | 0.34183650  | -0.51201901 | 0.72386137  | -0.30555979 | 0.01586065  |
| 0.00587471                   | 0.05311742  | -0.12523001 | 0.28589229  | 0.94179815  | -0.11288630 |
| 0.00019064                   | 0.00229105  | -0.00694237 | 0.01954195  | 0.11209514  | 0.99347839  |
| <i>J</i> = 10, <i>O</i> +    |             |             |             |             |             |
| 0.87028797                   | -0.45037026 | 0.19683325  | -0.03194770 | 0.00121995  |             |
| 0.47241616                   | 0.65021273  | -0.57823665 | 0.14010411  | -0.00771966 |             |
| 0.13783656                   | 0.59202890  | 0.67821666  | -0.41098770 | 0.04017629  |             |
| 0.02052390                   | 0.15395912  | 0.40517603  | 0.87719968  | -0.20549564 |             |
| 0.00129371                   | 0.01372595  | 0.05247461  | 0.20238580  | 0.97780178  |             |
| <i>J</i> = 10, <i>O</i> —    |             |             |             |             |             |
| 0.50251112                   | -0.67301926 | -0.53865977 | -0.06610512 | 0.00184801  |             |
| 0.78455341                   | 0.09602886  | 0.59312254  | 0.15296504  | -0.00785774 |             |
| 0.35666288                   | 0.68790286  | -0.47578721 | -0.41423527 | 0.04021082  |             |
| 0.06872962                   | 0.25276614  | -0.35938775 | 0.87177611  | -0.20550519 |             |
| 0.00513272                   | 0.02687874  | -0.05018244 | 0.20161191  | 0.97779627  |             |
| <i>J</i> = 10, <i>E</i> —    |             |             |             |             |             |
| 0.78607424                   | -0.58328003 | 0.20375756  | -0.01882613 | 0.00036096  |             |
| 0.59274251                   | 0.61801688  | -0.51018154 | 0.08012863  | -0.00237574 |             |
| 0.17400265                   | 0.51697517  | 0.78038258  | -0.30530518 | 0.01585994  |             |
| 0.02158769                   | 0.10271381  | 0.29798722  | 0.94204256  | -0.11288614 |             |
| 0.00080700                   | 0.00510786  | 0.02010733  | 0.11211398  | 0.99347844  |             |
| <i>J</i> = 11, <i>E</i> +    |             |             |             |             |             |
| 0.64806566                   | -0.50213263 | 0.51144406  | 0.25685139  | 0.01805319  | -0.00038476 |
| 0.69500568                   | 0.09699603  | -0.57126125 | -0.42325715 | -0.04550539 | 0.00145233  |
| 0.30230960                   | 0.75002055  | 0.06276422  | 0.56898837  | 0.13541374  | -0.00735412 |
| 0.07412110                   | 0.41074760  | 0.60042073  | -0.55143911 | -0.39961515 | 0.03885940  |
| 0.00962761                   | 0.08466302  | 0.21709414  | -0.35342450 | 0.88299533  | -0.20253393 |
| 0.00054453                   | 0.00650747  | 0.02261167  | -0.04624943 | 0.19973344  | 0.97847515  |

TABLE I. -- TRANSFORMATION COEFFICIENTS -- CONTINUED

| KAPPA = -0.100000 -- CONTINUED |             |             |             |             |             |             |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J = 11, O+</i>              |             |             |             |             |             |             |
| 0.85527402                     | -0.46044170 | -0.23164589 | -0.05319024 | 0.00328168  | -0.00004697 |             |
| 0.49160045                     | 0.57902917  | 0.61635371  | -0.20697645 | -0.01797088 | 0.00035312  |             |
| 0.16118358                     | 0.63899343  | -0.55995904 | -0.49635628 | 0.07601473  | -0.00230869 |             |
| 0.02912762                     | 0.20897696  | -0.49328817 | 0.78921578  | -0.29839970 | 0.01559079  |             |
| 0.00260251                     | 0.02708559  | -0.09766205 | 0.29108675  | 0.94468993  | -0.11203195 |             |
| 0.00007664                     | 0.00103210  | -0.00480265 | 0.01920833  | 0.11138488  | 0.99357954  |             |
| <i>J = 11, O-</i>              |             |             |             |             |             |             |
| 0.46776535                     | -0.61764523 | 0.61879128  | -0.12952902 | 0.00543347  | -0.00006531 |             |
| 0.78046102                     | -0.03660589 | -0.57638803 | 0.23869089  | -0.01854661 | 0.00035623  |             |
| 0.40355508                     | 0.70374491  | 0.29186162  | -0.50089195 | 0.07619128  | -0.00230925 |             |
| 0.09547338                     | 0.34484074  | 0.43580975  | 0.76988560  | -0.29845041 | 0.01559090  |             |
| 0.01020702                     | 0.05474234  | 0.09865947  | 0.28682957  | 0.94463910  | -0.11203198 |             |
| 0.00034163                     | 0.00236955  | 0.00521153  | 0.01900271  | 0.11138092  | 0.99357954  |             |
| <i>J = 11, E-</i>              |             |             |             |             |             |             |
| 0.75047348                     | 0.60340188  | 0.26706241  | -0.03703513 | 0.00134179  |             |             |
| 0.62378440                     | -0.51361577 | -0.57404964 | 0.13230703  | -0.00732995 |             |             |
| 0.21555988                     | -0.58846437 | 0.66832846  | -0.39883720 | 0.03885338  |             |             |
| 0.03480356                     | -0.16002020 | 0.38740467  | 0.88435318  | -0.20253228 |             |             |
| 0.00228819                     | -0.01443044 | 0.04898334  | 0.19992897  | 0.97847614  |             |             |
| <i>J = 12, E+</i>              |             |             |             |             |             |             |
| 0.63374728                     | -0.48543440 | 0.49298017  | 0.34370259  | 0.03943762  | -0.00125839 | 0.00001205  |
| 0.69594037                     | 0.03932347  | -0.48727182 | -0.51888166 | -0.08620983 | 0.00406477  | -0.00005472 |
| 0.32510265                     | 0.72662644  | -0.10828841 | 0.55842380  | 0.20608629  | -0.01694357 | 0.00034250  |
| 0.09019525                     | 0.46911011  | 0.63511973  | -0.35891220 | -0.48404380 | 0.07281489  | -0.00225539 |
| 0.01425371                     | 0.12073358  | 0.31918709  | -0.40590853 | 0.79530766  | -0.29296320 | 0.01537474  |
| 0.00114278                     | 0.01341731  | 0.05047964  | -0.08482531 | 0.28528348  | 0.94672778  | -0.11133276 |
| 0.00003080                     | 0.00045760  | 0.00216326  | -0.00426340 | 0.01848342  | 0.11077848  | 0.99366163  |
| <i>J = 12, O+</i>              |             |             |             |             |             |             |
| 0.84134835                     | -0.46687984 | -0.26038436 | -0.07938756 | 0.00733074  | -0.00019743 |             |
| 0.50705910                     | 0.51263529  | 0.63297455  | 0.27960911  | -0.03544603 | 0.00129108  |             |
| 0.18305920                     | 0.66908043  | -0.43347096 | -0.56153591 | 0.12470745  | -0.00700771 |             |
| 0.03864577                     | 0.26366942  | -0.56499911 | 0.67606187  | -0.38893568 | 0.03781978  |             |
| 0.00445033                     | 0.04504261  | -0.15564873 | 0.37549328  | 0.89031815  | -0.20015800 |             |
| 0.00022826                     | 0.00304228  | -0.01398607 | 0.04624860  | 0.19799122  | 0.97900747  |             |
| <i>J = 12, O-</i>              |             |             |             |             |             |             |
| 0.43828619                     | -0.57011421 | 0.65687374  | -0.22629872 | 0.01344237  | -0.00029201 |             |
| 0.77175242                     | -0.13880780 | -0.51718153 | 0.34095890  | -0.03740546 | 0.00131019  |             |
| 0.44350275                     | 0.68254628  | 0.10168599  | -0.55795926 | 0.12541187  | -0.00701187 |             |
| 0.12374162                     | 0.42597510  | 0.51027717  | 0.62451014  | -0.38911065 | 0.03782081  |             |
| 0.01719652                     | 0.09125505  | 0.17325458  | 0.35943535  | 0.89000142  | -0.20015828 |             |
| 0.00100984                     | 0.00710520  | 0.01732538  | 0.04484067  | 0.19794535  | 0.97900729  |             |
| <i>J = 12, E-</i>              |             |             |             |             |             |             |
| 0.71767664                     | -0.61210002 | -0.32578024 | -0.06424822 | 0.00363499  | -0.00005192 |             |
| 0.64599966                     | 0.41080586  | 0.61217647  | 0.19717905  | -0.01683042 | 0.00034202  |             |
| 0.25504155                     | 0.63709888  | -0.53916653 | -0.48275892 | 0.07278058  | -0.00225531 |             |
| 0.05055603                     | 0.22315891  | -0.46914098 | 0.80093248  | -0.29295342 | 0.01537473  |             |
| 0.00474920                     | 0.02959629  | -0.09107183 | 0.28653043  | 0.94673795  | -0.11133276 |             |
| 0.00014388                     | 0.00113580  | -0.00439651 | 0.01854410  | 0.11077928  | 0.99366163  |             |
| <i>J = 13, E+</i>              |             |             |             |             |             |             |
| 0.62089595                     | -0.47140548 | 0.46879581  | -0.40795422 | 0.07782801  | -0.00342535 | 0.00005954  |
| 0.69554876                     | -0.00794734 | -0.40426899 | 0.57445072  | -0.15043008 | 0.00961558  | -0.00023359 |
| 0.34503066                     | 0.69612654  | -0.24223360 | -0.50180922 | 0.29113362  | -0.03334341 | 0.00123069  |
| 0.10613016                     | 0.51686927  | 0.61622487  | 0.16692929  | -0.54759268 | 0.11866215  | -0.00675334 |
| 0.01965301                     | 0.15945118  | 0.41269219  | 0.45156726  | 0.67336669  | -0.38101180 | 0.03699386  |
| 0.00203230                     | 0.02326090  | 0.08957377  | 0.14074822  | 0.36243864  | 0.89496967  | -0.19821402 |
| 0.00009536                     | 0.00140082  | 0.00696834  | 0.01337140  | 0.04373316  | 0.19637365  | 0.97943630  |



TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

| KAPPA = -0.100000 --CONTINUED |             |             |             |             |             |             |             |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 13, <i>O</i> +     |             |             |             |             |             |             |             |
| 0.82840355                    | -0.47085768 | -0.28302186 | 0.10832064  | 0.01433581  | -0.00059819 | 0.00000675  |             |
| 0.51957112                    | 0.45183948  | 0.63170668  | -0.35063501 | -0.06226335 | 0.00345911  | -0.00005097 |             |
| 0.20337985                    | 0.68555743  | -0.30611334 | 0.60017160  | 0.18569966  | -0.01586958 | 0.00033250  |             |
| 0.04881454                    | 0.31561162  | -0.61384690 | -0.54252424 | -0.47109046 | 0.07024786  | -0.00221225 |             |
| 0.00685107                    | 0.06702167  | -0.22237436 | -0.45111417 | 0.81178938  | -0.28857208 | 0.01519754  |             |
| 0.00049812                    | 0.00651895  | -0.02966912 | -0.08522343 | 0.28316097  | 0.94835030  | -0.11074989 |             |
| 0.00001238                    | 0.00020114  | -0.00113553 | -0.00402627 | 0.01802871  | 0.11026756  | 0.99372959  |             |
| <i>J</i> = 13, <i>O</i> -     |             |             |             |             |             |             |             |
| 0.41288723                    | -0.53084916 | 0.65371060  | 0.34570154  | 0.02958558  | -0.00094773 | 0.00000934  |             |
| 0.76021141                    | -0.21701799 | -0.42082850 | -0.43959788 | -0.06801717 | 0.00354217  | -0.00005139 |             |
| 0.47712983                    | 0.64013308  | -0.08879552 | 0.56488915  | 0.18798865  | -0.01589118 | 0.00033257  |             |
| 0.15253775                    | 0.49304906  | 0.55863249  | -0.44088969 | -0.47142371 | 0.07025435  | -0.00221227 |             |
| 0.02602591                    | 0.19417106  | 0.27176609  | -0.40909457 | 0.81030842  | -0.28857391 | 0.01519754  |             |
| 0.00218060                    | 0.01524721  | 0.04184547  | -0.07992196 | 0.28283232  | 0.94834853  | -0.11074989 |             |
| 0.00006034                    | 0.00052452  | 0.00175284  | -0.00384729 | 0.01801269  | 0.11026740  | 0.99372959  |             |
| <i>J</i> = 13, <i>E</i> -     |             |             |             |             |             |             |             |
| 0.68757179                    | -0.61296560 | -0.37593175 | -0.10062600 | 0.00823909  | -0.00021740 |             |             |
| 0.66136457                    | 0.31420758  | 0.62414232  | 0.27061430  | -0.03291313 | 0.00122744  |             |             |
| 0.29173558                    | 0.66366019  | -0.39905286 | -0.54873685 | 0.11850989  | -0.00675263 |             |             |
| 0.06828389                    | 0.28723998  | -0.53690430 | 0.69141474  | -0.38097429 | 0.03699368  |             |             |
| 0.00833109                    | 0.05082320  | -0.14643761 | 0.36812853  | 0.89503979  | -0.19821398 |             |             |
| 0.00044204                    | 0.00348193  | -0.01297317 | 0.04424054  | 0.19638385  | 0.97943634  |             |             |
| <i>J</i> = 14, <i>E</i> +     |             |             |             |             |             |             |             |
| 0.60925921                    | -0.45933947 | 0.44704447  | -0.44578308 | -0.13846135 | -0.00821978 | 0.00021173  | -0.00000172 |
| 0.69421277                    | -0.04726321 | -0.33243325 | 0.58878566  | 0.24133064  | 0.02033195  | -0.00072637 | 0.00000789  |
| 0.36247623                    | 0.66189447  | -0.33947178 | -0.40734993 | -0.38187687 | -0.05908557 | 0.00325384  | -0.00004953 |
| 0.12170176                    | 0.55471019  | 0.56240638  | -0.02276295 | 0.57390394  | 0.17627242  | -0.01511245 | 0.00032471  |
| 0.02570878                    | 0.19914645  | 0.48893577  | 0.48849452  | -0.51415983 | -0.46149150 | 0.06822902  | -0.00217688 |
| 0.00324413                    | 0.03601040  | 0.13708464  | 0.22017707  | -0.42059939 | 0.82041488  | -0.28497661 | 0.01504960  |
| 0.00021577                    | 0.00311397  | 0.01570559  | 0.03240689  | -0.07819760 | 0.28034084  | 0.94964785  | -0.11025652 |
| 0.00000497                    | 0.00068770  | 0.00054024  | 0.00131285  | -0.00364124 | 0.01760694  | 0.10982965  | 0.99378678  |
| <i>J</i> = 14, <i>O</i> +     |             |             |             |             |             |             |             |
| 0.81633825                    | -0.47314024 | 0.30033758  | 0.13744483  | 0.02518264  | -0.00150383 | 0.00003132  |             |
| 0.52973058                    | 0.39667582  | -0.61733429 | -0.41343697 | -0.09970554 | 0.00779858  | -0.00020989 |             |
| 0.22215247                    | 0.69148468  | 0.18485643  | 0.60969712  | 0.25622496  | -0.03069422 | 0.00117357  |             |
| 0.05940491                    | 0.36331392  | 0.63745246  | -0.39536786 | -0.53746065 | 0.11360384  | -0.00654848 |             |
| 0.00979092                    | 0.09219739  | 0.29223298  | -0.51314996 | 0.70788962  | -0.37450500 | 0.03631900  |             |
| 0.00091864                    | 0.01173784  | 0.05258315  | -0.13663431 | 0.36328474  | 0.89877852  | -0.19659307 |             |
| 0.00003972                    | 0.00063767  | 0.00361537  | -0.01185962 | 0.04273106  | 0.19501830  | 0.97978967  |             |
| <i>J</i> = 14, <i>O</i> -     |             |             |             |             |             |             |             |
| 0.39072748                    | -0.49809995 | 0.62091978  | 0.45840139  | 0.05957057  | -0.00257221 | 0.00004561  |             |
| 0.74698458                    | -0.27731824 | -0.30654282 | -0.50788393 | -0.11457959 | 0.00809450  | -0.00021262 |             |
| 0.50517312                    | 0.58647970  | -0.25391632 | 0.51635568  | 0.26228972  | -0.03078493 | 0.00117412  |             |
| 0.18109947                    | 0.54545629  | 0.55562036  | -0.24383001 | -0.53717542 | 0.11363554  | -0.00654860 |             |
| 0.03651531                    | 0.18100869  | 0.37519273  | -0.43604629 | 0.70244067  | -0.37451275 | 0.03631903  |             |
| 0.00397093                    | 0.02725995  | 0.08059039  | -0.12485077 | 0.36157120  | 0.89876361  | -0.19659308 |             |
| 0.00019216                    | 0.00166585  | 0.00618505  | -0.01126787 | 0.04257816  | 0.19501613  | 0.97978966  |             |
| <i>J</i> = 14, <i>E</i> -     |             |             |             |             |             |             |             |
| 0.65995004                    | -0.60879615 | -0.41561322 | 0.14431532  | 0.01647736  | -0.00065974 | 0.00000749  |             |
| 0.67143293                    | 0.22621033  | 0.61243626  | -0.34581984 | -0.05767733 | 0.00323820  | -0.00004947 |             |
| 0.32531282                    | 0.67138952  | -0.25533172 | 0.58915799  | 0.17572105  | -0.01510842 | 0.00032470  |             |
| 0.08742354                    | 0.34836020  | -0.58395585 | -0.55896164 | -0.46141085 | 0.06822782  | -0.00217687 |             |
| 0.01309483                    | 0.07757516  | -0.21259071 | -0.43988664 | 0.82077865  | -0.28497627 | 0.01504960  |             |
| 0.00099022                    | 0.00771055  | -0.02815693 | -0.08076059 | 0.28042153  | 0.94964822  | -0.11025652 |             |
| 0.00002521                    | 0.00024024  | -0.00106659 | -0.00373374 | 0.01761087  | 0.10982968  | 0.99378678  |             |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

|                                     |             |             |             |             |             |             |             |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>KAPPA</i> = -0.100000--CONTINUED |             |             |             |             |             |             |             |
| <i>J</i> = 15, <i>E</i> +           |             |             |             |             |             |             |             |
| 0.59864344                          | -0.44876824 | 0.42924345  | -0.45656833 | -0.21727074 | -0.01793199 | 0.00062465  | -0.00000916 |
| 0.69220005                          | -0.08036180 | -0.27218650 | 0.56330131  | 0.34847804  | 0.03958126  | -0.00189524 | 0.00003697  |
| 0.37777635                          | 0.62603841  | -0.40802462 | -0.28167530 | -0.45836289 | -0.09688332 | 0.00727431  | -0.00020051 |
| 0.13676125                          | 0.58367642  | 0.49011444  | -0.20330027 | 0.54650744  | 0.24406125  | -0.02893932 | 0.00113001  |
| 0.03230102                          | 0.23846943  | 0.54594989  | 0.49720901  | -0.32592108 | -0.52774384 | 0.10969071  | -0.00638195 |
| 0.00479428                          | 0.05143242  | 0.18988801  | 0.31924271  | -0.44930140 | 0.72105875  | -0.36916430 | 0.03575773  |
| 0.00041164                          | 0.00580919  | 0.02909274  | 0.06639016  | -0.11994140 | 0.35916354  | 0.90178516  | -0.19522088 |
| 0.00001650                          | 0.00028742  | 0.00178772  | 0.00496565  | -0.01035973 | 0.04149424  | 0.19384226  | 0.98008579  |
| <i>J</i> = 15, <i>O</i> +           |             |             |             |             |             |             |             |
| 0.80506090                          | -0.47422895 | 0.31344267  | 0.16462760  | -0.04030251 | -0.00331532 | 0.00010446  | -0.00000097 |
| 0.53799457                          | 0.34681473  | -0.59450434 | -0.46356881 | 0.14732915  | 0.01560982  | -0.00062891 | 0.00000738  |
| 0.23943585                          | 0.68942906  | 0.07450953  | 0.59114629  | -0.33089799 | -0.05338216 | 0.00305091  | -0.00004814 |
| 0.07022648                          | 0.40600199  | 0.63752198  | -0.24223370 | 0.58035275  | 0.16762891  | -0.01450227 | 0.00031827  |
| 0.01323639                          | 0.11966237  | 0.35981629  | -0.55629808 | -0.58014775 | -0.45338848 | 0.06658281  | -0.00214729 |
| 0.00151687                          | 0.01884580  | 0.08243769  | -0.19931914 | -0.43333737 | 0.82801307  | -0.28197305 | 0.01492422  |
| 0.00009296                          | 0.00146691  | 0.00827891  | -0.02596151 | -0.07747274 | 0.27808541  | 0.95071467  | -0.10983352 |
| 0.00000200                          | 0.00003799  | 0.00025858  | -0.00096813 | -0.00351104 | 0.01726247  | 0.10945101  | 0.99383558  |
| <i>J</i> = 15, <i>O</i> --          |             |             |             |             |             |             |             |
| 0.37119099                          | -0.47024825 | 0.57874743  | 0.54201075  | -0.11100169 | -0.00617985 | 0.00016087  | -0.00000134 |
| 0.73282066                          | -0.32418909 | -0.19800983 | -0.53444124 | 0.18101492  | 0.01652779  | -0.00064131 | 0.00000744  |
| 0.52836974                          | 0.52763065  | -0.37498015 | 0.42535583  | -0.34351072 | -0.05370920 | 0.00305379  | -0.00004815 |
| 0.20887691                          | 0.58384043  | 0.50326634  | -0.05415408 | 0.57527285  | 0.16775526  | -0.01450300 | 0.00031827  |
| 0.04842516                          | 0.22939196  | 0.46330907  | -0.44957602 | -0.56413177 | -0.45340697 | 0.06658303  | -0.00214729 |
| 0.00646478                          | 0.04323212  | 0.13068552  | -0.18427350 | -0.42644688 | 0.82792829  | -0.28197311 | 0.01492422  |
| 0.00044547                          | 0.00381682  | 0.01490406  | -0.02569721 | -0.07655106 | 0.27806662  | 0.95071460  | -0.10983352 |
| 0.00001050                          | 0.00010862  | 0.00050860  | -0.00100140 | -0.00347741 | 0.01726156  | 0.10945100  | 0.99383558  |
| <i>J</i> = 15, <i>E</i> --          |             |             |             |             |             |             |             |
| 0.63457627                          | -0.60151464 | 0.44477969  | 0.19175640  | 0.02984649  | -0.00166949 | 0.00003457  |             |
| 0.67740805                          | 0.14752505  | -0.58180675 | -0.41495575 | -0.09281844 | 0.00721300  | -0.00020006 |             |
| 0.35569360                          | 0.66425579  | 0.11610584  | 0.59930020  | 0.24241972  | -0.02892081 | 0.00112992  |             |
| 0.10745982                          | 0.40389717  | 0.60548119  | -0.40995017 | -0.52780819 | 0.10968431  | -0.00638193 |             |
| 0.01903278                          | 0.10882875  | 0.28450494  | -0.49719827 | 0.72255458  | -0.36916275 | 0.03575772  |             |
| 0.00186703                          | 0.01426541  | 0.05126936  | -0.12843874 | 0.35963143  | 0.90178822  | -0.19522088 |             |
| 0.00008305                          | 0.00078650  | 0.00350661  | -0.01089530 | 0.04153586  | 0.19384271  | 0.98008579  |             |
| <i>KAPPA</i> = -0.200000            |             |             |             |             |             |             |             |
| <i>J</i> = 2, <i>E</i> +            |             |             |             |             |             |             |             |
| 0.97919940                          | -0.20290030 |             |             |             |             |             |             |
| 0.20290030                          | 0.97919940  |             |             |             |             |             |             |
| <i>J</i> = 3, <i>E</i> +            |             |             |             |             |             |             |             |
| 0.92693614                          | -0.37521913 |             |             |             |             |             |             |
| 0.37521913                          | 0.92693614  |             |             |             |             |             |             |
| <i>J</i> = 3, <i>O</i> +            |             |             |             |             |             |             |             |
| 0.99494979                          | -0.10037384 |             |             |             |             |             |             |
| 0.10037384                          | 0.99494979  |             |             |             |             |             |             |
| <i>J</i> = 3, <i>O</i> --           |             |             |             |             |             |             |             |
| 0.98953846                          | -0.14426934 |             |             |             |             |             |             |
| 0.14426934                          | 0.98953846  |             |             |             |             |             |             |
| <i>J</i> = 4, <i>E</i> +            |             |             |             |             |             |             |             |
| 0.86625878                          | -0.49902775 | 0.02381254  |             |             |             |             |             |
| 0.49824120                          | 0.85942127  | -0.11467692 |             |             |             |             |             |
| 0.03676196                          | 0.11120428  | 0.99311740  |             |             |             |             |             |
| <i>J</i> = 4, <i>O</i> +            |             |             |             |             |             |             |             |
| 0.98372109                          | -0.17970205 |             |             |             |             |             |             |
| 0.17970205                          | 0.98372109  |             |             |             |             |             |             |
| <i>J</i> = 4, <i>O</i> --           |             |             |             |             |             |             |             |
| 0.95155945                          | -0.30746483 |             |             |             |             |             |             |
| 0.30746483                          | 0.95155945  |             |             |             |             |             |             |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

| KAPPA = -0.200000 -CONTINUED |             |             |             |
|------------------------------|-------------|-------------|-------------|
| <i>J = 4, E -</i>            |             |             |             |
| 0.99411925                   | -0.10829093 |             |             |
| 0.10829093                   | 0.99411925  |             |             |
| <i>J = 5, E +</i>            |             |             |             |
| 0.81495011                   | -0.57522374 | 0.07052637  |             |
| 0.57451184                   | 0.78590525  | -0.22866807 |             |
| 0.07610826                   | 0.22687130  | 0.97094642  |             |
| <i>J = 5, O +</i>            |             |             |             |
| 0.96786062                   | -0.25118899 | 0.01224402  |             |
| 0.25105570                   | 0.96220310  | -0.10552833 |             |
| 0.01472632                   | 0.10521065  | 0.99434092  |             |
| <i>J = 5, O -</i>            |             |             |             |
| 0.87597098                   | -0.48206832 | 0.01688107  |             |
| 0.48097207                   | 0.87025200  | -0.10642991 |             |
| 0.03661570                   | 0.10134883  | 0.99417690  |             |
| <i>J = 5, E -</i>            |             |             |             |
| 0.97919940                   | -0.20290030 |             |             |
| 0.20290030                   | 0.97919940  |             |             |
| <i>J = 6, E +</i>            |             |             |             |
| 0.77467201                   | -0.61416013 | 0.15060905  | -0.00274565 |
| 0.62131536                   | 0.69492778  | -0.36173794 | 0.01372117  |
| 0.11754960                   | 0.37301494  | 0.91459593  | -0.10274354 |
| 0.00571004                   | 0.02725028  | 0.09988424  | 0.99460945  |
| <i>J = 6, O +</i>            |             |             |             |
| 0.94974637                   | -0.31144161 | 0.03139980  |             |
| 0.31133337                   | 0.92946189  | -0.19791947 |             |
| 0.03245544                   | 0.19774911  | 0.97971523  |             |
| <i>J = 6, O -</i>            |             |             |             |
| 0.78269251                   | -0.62043825 | 0.04948557  |             |
| 0.61615579                   | 0.76113516  | -0.20254707 |             |
| 0.08800275                   | 0.18902289  | 0.97802140  |             |
| <i>J = 6, E -</i>            |             |             |             |
| 0.95440708                   | -0.29822113 | 0.01308771  |             |
| 0.29795392                   | 0.94904841  | -0.10261864 |             |
| 0.01818218                   | 0.10183949  | 0.99463467  |             |
| <i>J = 7, E +</i>            |             |             |             |
| 0.74267673                   | 0.61870810  | 0.25599778  | -0.00983347 |
| 0.65067130                   | -0.57656678 | -0.49276358 | 0.03717062  |
| 0.15771671                   | -0.52834300 | 0.81202435  | -0.19129969 |
| 0.01354882                   | -0.07499805 | 0.17962641  | 0.98077830  |
| <i>J = 7, O +</i>            |             |             |             |
| 0.93118573                   | -0.35968021 | 0.05933863  | -0.00148877 |
| 0.36056431                   | 0.88474429  | -0.29506032 | 0.01266181  |
| 0.05368023                   | 0.29585599  | 0.94841585  | -0.10047405 |
| 0.00222584                   | 0.01808088  | 0.09962781  | 0.99485799  |
| <i>J = 7, O -</i>            |             |             |             |
| 0.69764939                   | 0.70804057  | 0.10936108  | -0.00200768 |
| 0.70074410                   | -0.64260327 | -0.30960659 | 0.01274766  |
| 0.14895357                   | -0.29213987 | 0.93934481  | -0.10049113 |
| 0.00747478                   | -0.01984638 | 0.09907194  | 0.99485426  |
| <i>J = 7, E -</i>            |             |             |             |
| 0.92179406                   | -0.38617590 | 0.03411587  |             |
| 0.38531318                   | 0.90290335  | -0.19052373 |             |
| 0.04277233                   | 0.18876893  | 0.98108961  |             |

TABLE I. -- TRANSFORMATION COEFFICIENTS -- CONTINUED

| KAPPA = -0.200000 -- CONTINUED |             |             |             |             |             |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 8, <i>E</i> +       |             |             |             |             |             |
| 0.71649521                     | -0.59762330 | 0.35891055  | -0.02577037 | 0.00032517  |             |
| 0.66936911                     | 0.44484245  | -0.59002914 | 0.07696126  | -0.00166530 |             |
| 0.19495395                     | 0.65140111  | 0.67488442  | -0.28644495 | 0.01224127  |             |
| 0.02391276                     | 0.14347991  | 0.25944448  | 0.94960336  | -0.09891265 |             |
| 0.00086482                     | 0.00718893  | 0.01638321  | 0.09805917  | 0.99501938  |             |
| <i>J</i> = 8, <i>O</i> +       |             |             |             |             |             |
| 0.91316991                     | -0.39649428 | 0.09428740  | -0.00478466 |             |             |
| 0.40024370                     | 0.82869898  | -0.38987465 | 0.03256899  |             |             |
| 0.07677389                     | 0.39253081  | 0.89773512  | -0.18465369 |             |             |
| 0.00560982                     | 0.04438298  | 0.18215185  | 0.98225220  |             |             |
| <i>J</i> = 8, <i>O</i> -       |             |             |             |             |             |
| 0.62864177                     | 0.75025927  | 0.20462362  | -0.00705166 |             |             |
| 0.74816856                     | -0.51174975 | -0.42102606 | 0.03306146  |             |             |
| 0.21139670                     | -0.41490875 | 0.86545897  | -0.18477806 |             |             |
| 0.01909888                     | -0.05544323 | 0.17845728  | 0.98219870  |             |             |
| <i>J</i> = 8, <i>E</i> -       |             |             |             |             |             |
| 0.88487837                     | -0.46102636 | 0.06665152  | -0.00159609 |             |             |
| 0.45978732                     | 0.84147204  | -0.28349754 | 0.01222971  |             |             |
| 0.07467070                     | 0.28123788  | 0.95160196  | -0.09891034 |             |             |
| 0.00319087                     | 0.01687457  | 0.09818572  | 0.99501992  |             |             |
| <i>J</i> = 9, <i>E</i> +       |             |             |             |             |             |
| 0.69447226                     | -0.56799125 | -0.43804268 | -0.05666625 | 0.00133024  |             |
| 0.68126117                     | 0.32450059  | 0.64135560  | 0.13861977  | -0.00548986 |             |
| 0.22863305                     | 0.72317427  | -0.52542132 | -0.38434102 | 0.03098901  |             |
| 0.03623700                     | 0.22066714  | -0.34482934 | 0.89363094  | -0.18030353 |             |
| 0.00230368                     | 0.02025583  | -0.04250609 | 0.17685932  | 0.98310651  |             |
| <i>J</i> = 9, <i>O</i> +       |             |             |             |             |             |
| 0.89612668                     | -0.42328432 | 0.13289637  | -0.01121945 | 0.00018158  |             |
| 0.43215174                     | 0.76424209  | -0.47448985 | 0.06352862  | -0.00154690 |             |
| 0.10045894                     | 0.47977536  | 0.82764693  | -0.27309816 | 0.01189791  |             |
| 0.01047508                     | 0.08104231  | 0.26823948  | 0.95489182  | -0.09773232 |             |
| 0.00033591                     | 0.00348815  | 0.01568651  | 0.09714549  | 0.99514040  |             |
| <i>J</i> = 9, <i>O</i> -       |             |             |             |             |             |
| 0.57356321                     | 0.74944949  | 0.33017272  | -0.01834726 | 0.00024218  |             |
| 0.77228323                     | -0.36093436 | -0.51866587 | 0.06548513  | -0.00155610 |             |
| 0.27081088                     | -0.54276597 | 0.74635150  | -0.27365017 | 0.01189946  |             |
| 0.03554701                     | -0.11586713 | 0.25436420  | 0.95449379  | -0.09773263 |             |
| 0.00132086                     | -0.00563592 | 0.01516515  | 0.09711980  | 0.99514032  |             |
| <i>J</i> = 9, <i>E</i> -       |             |             |             |             |             |
| 0.84684045                     | -0.52014704 | 0.11082398  | -0.00513362 |             |             |
| 0.51998911                     | 0.76603240  | -0.37662997 | 0.03091221  |             |             |
| 0.11135734                     | 0.37533346  | 0.90234247  | -0.18028423 |             |             |
| 0.00849272                     | 0.04202631  | 0.17789318  | 0.98311529  |             |             |
| <i>J</i> = 10, <i>E</i> +      |             |             |             |             |             |
| 0.67553533                     | -0.54060295 | -0.48934779 | -0.10919527 | 0.00395112  | -0.00003911 |
| 0.68863870                     | 0.22563415  | 0.65083444  | 0.22605017  | -0.01348305 | 0.00020367  |
| 0.25868044                     | 0.75314508  | -0.36819969 | -0.47612012 | 0.05994414  | -0.00149506 |
| 0.04992685                     | 0.29662809  | -0.44017432 | 0.80332828  | -0.26512963 | 0.01164517  |
| 0.00452677                     | 0.04024521  | -0.08724958 | 0.25443718  | 0.95741106  | -0.09681496 |
| 0.00013038                     | 0.00150814  | -0.00404260 | 0.01458582  | 0.09633092  | 0.99523313  |
| <i>J</i> = 10, <i>O</i> +      |             |             |             |             |             |
| 0.88018408                     | -0.44199878 | 0.17155071  | -0.02197611 | 0.00068305  |             |
| 0.45788031                     | 0.69572861  | -0.54304095 | 0.10672377  | -0.00488629 |             |
| 0.12386025                     | 0.55197943  | 0.74013796  | -0.36234748 | 0.02962185  |             |
| 0.01671378                     | 0.12578565  | 0.35547658  | 0.90896347  | -0.17697579 |             |
| 0.00094036                     | 0.00977050  | 0.03884685  | 0.17497658  | 0.98375697  |             |

TABLE I. -- TRANSFORMATION COEFFICIENTS -- CONTINUED

| KAPPA = -0.200000 -- CONTINUED |             |             |             |             |             |             |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J = 10, O --</i>            |             |             |             |             |             |             |
| 0.52887447                     | 0.71290427  | 0.45870626  | -0.04058221 | 0.00097302  |             |             |
| 0.78200026                     | -0.20115280 | -0.57899831 | 0.11291453  | -0.00494078 |             |             |
| 0.32498183                     | -0.64192379 | 0.59068972  | -0.36404418 | 0.02963353  |             |             |
| 0.05604053                     | -0.19728042 | 0.32260637  | 0.90694187  | -0.17697872 |             |             |
| 0.00369676                     | -0.01786977 | 0.03688234  | 0.17473314  | 0.98375557  |             |             |
| <i>J = 10, E --</i>            |             |             |             |             |             |             |
| 0.80974226                     | -0.56317823 | 0.16431490  | -0.01217874 | 0.00019568  |             |             |
| 0.56695874                     | 0.67887769  | -0.46274102 | 0.05959354  | -0.00149384 |             |             |
| 0.15033429                     | 0.46447059  | 0.83143805  | -0.26503177 | 0.01164497  |             |             |
| 0.01656992                     | 0.07881071  | 0.25954443  | 0.95748518  | -0.09681492 |             |             |
| 0.00054466                     | 0.00336167  | 0.01479281  | 0.09633577  | 0.99523314  |             |             |
| <i>J = 11, E +</i>             |             |             |             |             |             |             |
| 0.65897029                     | -0.51796636 | -0.51299443 | -0.18495744 | 0.00982030  | -0.00017776 |             |
| 0.69293079                     | 0.14648852  | 0.62108053  | 0.33443139  | -0.02832036 | 0.00077616  |             |
| 0.28529488                     | 0.75607283  | -0.19836520 | -0.54535619 | 0.10088157  | -0.00463606 |             |
| 0.06445516                     | 0.36630154  | -0.53581613 | 0.67130143  | -0.35086162 | 0.02864091  |             |
| 0.00756913                     | 0.06640141  | -0.15640340 | 0.32352387  | 0.91432463  | -0.17439701 |             |
| 0.00038195                     | 0.00445866  | -0.01363774 | 0.03492430  | 0.17271660  | 0.98424756  |             |
| <i>J = 11, O +</i>             |             |             |             |             |             |             |
| 0.86533162                     | -0.45469578 | 0.20740741  | -0.03783692 | 0.00186418  | -0.00002225 |             |
| 0.47872091                     | 0.62726982  | -0.59255912 | 0.16155819  | -0.01146594 | 0.00019033  |             |
| 0.14642888                     | 0.60715905  | 0.63815659  | -0.44664102 | 0.05641217  | -0.00145128 |             |
| 0.02413136                     | 0.17534253  | 0.43958244  | 0.84161190  | -0.25884036 | 0.01144716  |             |
| 0.00193530                     | 0.01991902  | 0.07327960  | 0.25390621  | 0.95944242  | -0.09608053 |             |
| 0.00005059                     | 0.00066141  | 0.00306671  | 0.01414798  | 0.09567987  | 0.99530666  |             |
| <i>J = 11, O -</i>             |             |             |             |             |             |             |
| 0.49181323                     | -0.66064760 | -0.56142734 | -0.08034712 | 0.00286049  | -0.00002948 |             |
| 0.78267649                     | 0.05645192  | 0.59368953  | 0.17783885  | -0.01169340 | 0.00019138  |             |
| 0.37302963                     | 0.69089769  | -0.42151168 | -0.45016212 | 0.05647238  | -0.00145144 |             |
| 0.07955487                     | 0.28549095  | -0.38691043 | 0.83386346  | -0.25885701 | 0.01144719  |             |
| 0.00755812                     | 0.03887334  | -0.07036169 | 0.25247767  | 0.95942927  | -0.09608053 |             |
| 0.00022269                     | 0.00144621  | -0.00308782 | 0.01408913  | 0.09567900  | 0.99530666  |             |
| <i>J = 11, E -</i>             |             |             |             |             |             |             |
| 0.77463239                     | 0.59139510  | 0.22271307  | -0.02438950 | 0.00073248  |             |             |
| 0.60269262                     | -0.58400749 | -0.53455858 | 0.09961209  | -0.00462790 |             |             |
| 0.18961556                     | -0.54143429 | 0.73973797  | -0.35051732 | 0.028863916 |             |             |
| 0.02738011                     | -0.12625339 | 0.34077119  | 0.91475201  | -0.17439658 |             |             |
| 0.00159143                     | -0.00980225 | 0.03617670  | 0.17276849  | 0.98424777  |             |             |
| <i>J = 12, E +</i>             |             |             |             |             |             |             |
| 0.64428224                     | -0.49947744 | 0.51077046  | 0.27215552  | 0.02161585  | -0.00058355 | 0.00000475  |
| 0.69506514                     | 0.08266463  | -0.55758640 | -0.44301280 | -0.05369684 | 0.00217338  | -0.00002504 |
| 0.30878918                     | 0.74254308  | 0.02464319  | 0.57317251  | 0.15501566  | -0.01072922 | 0.00018425  |
| 0.07939325                     | 0.42747547  | 0.60506376  | -0.50447578 | -0.43295198 | 0.05398191  | -0.00141768 |
| 0.01140710                     | 0.09743098  | 0.24582488  | -0.37761271 | 0.85012696  | -0.25399324 | 0.01128843  |
| 0.00082009                     | 0.00951122  | 0.03271424  | -0.06364008 | 0.24953956  | 0.96093823  | -0.09547937 |
| 0.00001962                     | 0.00028325  | 0.00119094  | -0.00265916 | 0.01364873  | 0.09513635  | 0.99536637  |
| <i>J = 12, O +</i>             |             |             |             |             |             |             |
| 0.85150206                     | -0.46313476 | -0.23870589 | -0.05875308 | 0.00424264  | -0.00009440 |             |
| 0.49568402                     | 0.56169724  | 0.62257083  | 0.22511103  | -0.02288346 | 0.00069911  |             |
| 0.16785057                     | 0.64615641  | -0.52550161 | -0.51903818 | 0.09346632  | -0.00442177 |             |
| 0.03250153                     | 0.22652975  | -0.51473571 | 0.75198727  | -0.34119385 | 0.02787428  |             |
| 0.00337751                     | 0.03412472  | -0.11931804 | 0.33138640  | 0.91927809  | -0.17233151 |             |
| 0.00015451                     | 0.00201817  | -0.00913618 | 0.03421496  | 0.17098814  | 0.98463436  |             |
| <i>J = 12, O -</i>             |             |             |             |             |             |             |
| 0.46047011                     | -0.60974737 | 0.62853240  | -0.14516292 | 0.00708179  | -0.00013180 |             |
| 0.77759929                     | -0.06102181 | -0.56838797 | 0.26074991  | -0.02365975 | 0.00070557  |             |
| 0.41484876                     | 0.69570842  | 0.24927384  | -0.52244756 | 0.09371146  | -0.00442298 |             |
| 0.10505408                     | 0.36851997  | 0.45268870  | 0.72869365  | -0.34125971 | 0.02787453  |             |
| 0.01305012                     | 0.06816370  | 0.12131390  | 0.32534834  | 0.91919347  | -0.17233157 |             |
| 0.00067794                     | 0.00458468  | 0.01002823  | 0.03376067  | 0.17097781  | 0.98463433  |             |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

| KAPPA = -0.200000 --CONTINUED |             |             |             |             |             |             |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 12, <i>E</i> -     |             |             |             |             |             |             |
| 0.74191201                    | 0.60728139  | 0.28087507  | -0.04337134 | 0.00200314  | -0.00002409 |             |
| 0.62929122                    | -0.48660469 | -0.58671694 | 0.15118645  | -0.01069098 | 0.00018411  |             |
| 0.22780625                    | -0.60090520 | 0.63037436  | -0.43212318 | 0.05397191  | -0.00141766 |             |
| 0.04064390                    | -0.18139662 | 0.41821430  | 0.85199855  | -0.25399049 | 0.01128843  |             |
| 0.00339354                    | -0.02080685 | 0.06774751  | 0.24988582  | 0.96094048  | -0.09547937 |             |
| 0.00009059                    | -0.00068980 | 0.00276878  | 0.01366304  | 0.09513650  | 0.99536637  |             |
| <i>J</i> = 13, <i>E</i> +     |             |             |             |             |             |             |
| 0.63111491                    | -0.48409884 | 0.49226351  | 0.35090837  | 0.04335540  | -0.00159558 | 0.00002356  |
| 0.69566381                    | 0.03040967  | -0.47799326 | -0.52698315 | -0.09440253 | 0.00514495  | -0.00010697 |
| 0.32950692                    | 0.71917357  | -0.13005060 | 0.55436281  | 0.22255748  | -0.02123693 | 0.00066420  |
| 0.09441136                    | 0.47941767  | 0.62680074  | -0.32492576 | -0.50487823 | 0.08870792  | -0.00426037 |
| 0.01597822                    | 0.13184180  | 0.33983826  | -0.41912288 | 0.76093964  | -0.33382028 | 0.02726348  |
| 0.00148881                    | 0.01698754  | 0.06244601  | -0.10261032 | 0.32354253  | 0.92275820  | -0.17064104 |
| 0.00006229                    | 0.00089729  | 0.00414716  | -0.00802067 | 0.03264529  | 0.16950579  | 0.98494656  |
| <i>J</i> = 13, <i>O</i> +     |             |             |             |             |             |             |
| 0.83860956                    | -0.46862253 | -0.26468360 | -0.08364924 | 0.00849992  | -0.00028935 | 0.00000274  |
| 0.50955157                    | 0.50050014  | 0.63458339  | 0.29237909  | -0.04088571 | 0.00188515  | -0.00002352 |
| 0.18796964                    | 0.67121515  | -0.40721594 | -0.57295039 | 0.14120649  | -0.01006792 | 0.00017894  |
| 0.04159883                    | 0.27680962  | -0.57471381 | 0.64192495  | -0.42020064 | 0.05207550  | -0.00139059 |
| 0.00529533                    | 0.05214659  | -0.17528877 | 0.40391864  | 0.86064061  | -0.25009901 | 0.01115825  |
| 0.00034496                    | 0.00446311  | -0.01997853 | 0.06340995  | 0.24671775  | 0.96211719  | -0.09497819 |
| 0.00000761                    | 0.00012046  | -0.00065529 | 0.00252942  | 0.01327986  | 0.09467910  | 0.99541583  |
| <i>J</i> = 13, <i>O</i> -     |             |             |             |             |             |             |
| 0.43353260                    | -0.56605211 | 0.65921421  | -0.23838430 | 0.01561637  | -0.00042803 | 0.00000361  |
| 0.76885231                    | -0.15273575 | -0.50717547 | 0.35558741  | -0.04318437 | 0.00191331  | -0.00002364 |
| 0.45075843                    | 0.671151087 | 0.07210301  | -0.56605202 | 0.14203782  | -0.01007417 | 0.00017896  |
| 0.13161573                    | 0.44086488  | 0.51422937  | 0.58689862  | -0.42038037 | 0.05207712  | -0.00139059 |
| 0.02018635                    | 0.10422234  | 0.19484320  | 0.38484193  | 0.86022601  | -0.25009945 | 0.01115825  |
| 0.00150344                    | 0.01028235  | 0.02478594  | 0.06128830  | 0.24664100  | 0.96211682  | -0.09497819 |
| 0.00003668                    | 0.00030639  | 0.00087182  | 0.00246489  | 0.01327669  | 0.09467908  | 0.99541583  |
| <i>J</i> = 13, <i>E</i> -     |             |             |             |             |             |             |
| 0.71163666                    | -0.61385495 | -0.33437906 | -0.07017727 | 0.00459841  | -0.00010149 |             |
| 0.64861382                    | 0.39154313  | 0.61664835  | 0.21282299  | -0.02109125 | 0.00066325  |             |
| 0.26401753                    | 0.64089849  | -0.50770050 | -0.50388971 | 0.08866271  | -0.00426019 |             |
| 0.05595384                    | 0.24032126  | -0.48777226 | 0.76747758  | -0.33380824 | 0.02726344  |             |
| 0.00609951                    | 0.03696030  | -0.11038801 | 0.32523951  | 0.92277414  | -0.17064103 |             |
| 0.00028644                    | 0.00219638  | -0.00826868 | 0.03277354  | 0.16950774  | 0.98494657  |             |
| <i>J</i> = 14, <i>E</i> +     |             |             |             |             |             |             |
| 0.61920338                    | -0.47101040 | 0.46958551  | -0.40961172 | 0.08018256  | -0.00384958 | 0.00008407  |
| 0.69515522                    | -0.01300979 | -0.40059286 | 0.57600459  | -0.15561279 | 0.01088922  | -0.00033303 |
| 0.34778160                    | 0.69090943  | -0.25180350 | -0.49710256 | 0.30144218  | -0.03790388 | 0.000176347 |
| 0.10926634                    | 0.52224515  | 0.60438043  | 0.14718355  | -0.55724652 | 0.13329155  | -0.00958232 |
| 0.02119741                    | 0.16817178  | 0.42424359  | 0.45474630  | 0.64292108  | -0.41059195 | 0.05056641  |
| 0.00242135                    | 0.02700318  | 0.10125405  | 0.15657108  | 0.38867774  | 0.86737620  | -0.24690914 |
| 0.00014420                    | 0.00205732  | 0.00995040  | 0.01881217  | 0.05950650  | 0.24406540  | 0.96306461  |
| 0.00000295                    | 0.00005075  | 0.00029404  | 0.00063478  | 0.00232695  | 0.01296611  | 0.09428903  |
| <i>J</i> = 14, <i>O</i> +     |             |             |             |             |             |             |
| 0.82656642                    | -0.47205946 | -0.28540954 | 0.11068589  | 0.01540448  | -0.00073787 | 0.00001280  |
| 0.52092871                    | 0.44421823  | 0.63164304  | -0.35751420 | -0.06705010 | 0.00428773  | -0.00009726 |
| 0.20673292                    | 0.68492705  | -0.28919171 | 0.60379677  | 0.19886848  | -0.01962069 | 0.00063385  |
| 0.05121647                    | 0.32440831  | -0.61491295 | -0.51562094 | -0.49084125 | 0.08491783  | -0.00413118 |
| 0.00769275                    | 0.07345529  | -0.23763585 | -0.46789793 | 0.78162968  | -0.32784839 | 0.02676459  |
| 0.00064957                    | 0.00826938  | -0.03664966 | -0.10252896 | 0.32069592  | 0.92552178  | -0.16923169 |
| 0.00002504                    | 0.00039457  | -0.00216603 | -0.00748787 | 0.03165983  | 0.16825553  | 0.98520395  |
| <i>J</i> = 14, <i>O</i> -     |             |             |             |             |             |             |
| 0.41007523                    | -0.52949686 | 0.65449729  | 0.34943563  | 0.03159212  | -0.00116335 | 0.00001764  |
| 0.75779124                    | -0.22409405 | -0.41503146 | -0.44487803 | -0.07312622 | 0.00438820  | -0.00009805 |
| 0.48128182                    | 0.63030187  | -0.10318074 | 0.56528750  | 0.20125791  | -0.01964695 | 0.00063399  |
| 0.15848240                    | 0.50069367  | 0.55109800  | -0.41481880 | -0.49109680 | 0.08492587  | -0.00413120 |
| 0.02887899                    | 0.14517393  | 0.28705939  | -0.42318721 | 0.77999854  | -0.32785051 | 0.02676460  |
| 0.00280486                    | 0.01907452  | 0.05111646  | -0.09599579 | 0.32027429  | 0.92551889  | -0.16923169 |
| 0.00012018                    | 0.00101372  | 0.00330629  | -0.00714671 | 0.03162804  | 0.16825518  | 0.98520394  |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

| KAPPA = -0.200000 --CONTINUED |             |             |             |             |             |             |             |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 14, <i>E</i> -     |             |             |             |             |             |             |             |
| 0.68369896                    | -0.61393318 | -0.38024789 | -0.10471730 | 0.00935443  | -0.00031041 | 0.00000298  |             |
| 0.66219362                    | 0.30224891  | 0.62436714  | 0.28090424  | -0.03742442 | 0.00175894  | -0.00002280 |             |
| 0.29774310                    | 0.66238724  | -0.37680739 | -0.55928096 | 0.13312160  | -0.00958133 | 0.00017474  |             |
| 0.07285547                    | 0.29926428  | -0.54448995 | 0.66147501  | -0.41055531 | 0.05056616  | -0.00136834 |             |
| 0.00979959                    | 0.05822577  | -0.16367004 | 0.39515646  | 0.86746241  | -0.24690907 | 0.01104955  |             |
| 0.00065877                    | 0.00504151  | -0.01832661 | 0.06023756  | 0.24408135  | 0.96306467  | -0.09455396 |             |
| 0.00001480                    | 0.00013642  | -0.00059090 | 0.00234964  | 0.01296677  | 0.09428904  | 0.99545746  |             |
| <i>J</i> = 15, <i>E</i> +     |             |             |             |             |             |             |             |
| 0.60834538                    | -0.45964414 | 0.44903089  | -0.44543404 | -0.13613009 | -0.00845406 | 0.00024914  | -0.00000310 |
| 0.69384110                    | -0.04954733 | -0.33303628 | 0.58940363  | 0.23951693  | 0.02122923  | -0.00087030 | 0.00001450  |
| 0.36391875                    | 0.65791814  | -0.34176260 | -0.40777722 | -0.38428696 | -0.06269570 | 0.00396342  | -0.00009265 |
| 0.12378570                    | 0.55656272  | 0.55295542  | -0.02774171 | 0.57699059  | 0.18741901  | -0.01847543 | 0.00061023  |
| 0.02696943                    | 0.20513133  | 0.49296925  | 0.48234456  | -0.49435479 | -0.48000141 | -0.08194263 | -0.00402597 |
| 0.00363945                    | 0.03949065  | 0.14663665  | 0.23013503  | -0.43625033 | 0.79288101  | -0.32294559 | 0.02634956  |
| 0.00028094                    | 0.00394742  | 0.01935682  | 0.03893236  | -0.09359258 | 0.31688150  | 0.92773028  | -0.16803869 |
| 0.00001004                    | 0.00017173  | 0.00102565  | 0.00242466  | -0.00671188 | 0.03075167  | 0.16718317  | 0.98541976  |
| <i>J</i> = 15, <i>O</i> +     |             |             |             |             |             |             |             |
| 0.81529008                    | -0.47404991 | 0.30153069  | 0.13783306  | 0.02563819  | -0.00165566 | 0.00004312  | -0.00000034 |
| 0.53028624                    | 0.39284779  | -0.61759065 | -0.41534778 | -0.10227219 | 0.00868576  | -0.00029307 | 0.00000291  |
| 0.22415103                    | 0.68970476  | 0.17685345  | 0.60981653  | 0.26404313  | -0.03447898 | 0.00165577  | -0.00002218 |
| 0.06117431                    | 0.36822182  | 0.63378428  | -0.37859964 | -0.54726588 | 0.12675039  | -0.00919534 | 0.00017128  |
| 0.01055467                    | 0.09736938  | 0.30188324  | -0.51961495 | 0.68168050  | -0.40267889 | 0.04933763  | -0.00134975 |
| 0.00109316                    | 0.01362559  | 0.05950876  | -0.15165659 | 0.38938879  | 0.87285276  | -0.24424680 | 0.01095742  |
| 0.00005995                    | 0.00093536  | 0.00515500  | -0.01657387 | 0.05785791  | 0.24183403  | 0.96384377  | -0.09419022 |
| 0.00000114                    | 0.00002125  | 0.00013885  | -0.00052341 | 0.00221292  | 0.01270543  | 0.09395263  | 0.99549299  |
| <i>J</i> = 15, <i>O</i> -     |             |             |             |             |             |             |             |
| 0.38942509                    | -0.49864517 | 0.62421611  | 0.45441453  | 0.05962320  | -0.00280125 | 0.00006228  | -0.00000044 |
| 0.74531488                    | -0.27997993 | -0.30800469 | -0.50748157 | -0.11675399 | 0.00899797  | -0.00029667 | 0.00000293  |
| 0.50701375                    | 0.57979696  | -0.25555616 | 0.51716278  | 0.26982983  | -0.03457402 | 0.00165648  | -0.00002218 |
| 0.18506828                    | 0.54779162  | 0.54438669  | -0.23277116 | -0.54678711 | 0.12678353  | -0.00919549 | 0.00017128  |
| 0.03897115                    | 0.18905686  | 0.38171148  | -0.44152208 | 0.67638843  | -0.40268600 | 0.04933767  | -0.00134975 |
| 0.00466796                    | 0.03123704  | 0.08968183  | -0.13835281 | 0.38755568  | 0.87283570  | -0.24424681 | 0.01095742  |
| 0.00028596                    | 0.00240818  | 0.00866020  | -0.01570459 | 0.05765167  | 0.24183088  | 0.96384376  | -0.09419022 |
| 0.00000595                    | 0.00005963  | 0.00025164  | -0.00050843 | 0.00220652  | 0.01270530  | 0.09395263  | 0.99549299  |
| <i>J</i> = 15, <i>E</i> -     |             |             |             |             |             |             |             |
| 0.65792521                    | -0.60972583 | -0.41704120 | 0.14541100  | 0.01733413  | -0.00079340 | 0.00001381  |             |
| 0.67125605                    | 0.22051362  | 0.61200263  | -0.34995691 | -0.06128973 | 0.00394561  | -0.00009253 |             |
| 0.32874610                    | 0.66800934  | -0.24362101 | 0.59251507  | 0.18687610  | -0.01847085 | 0.00061021  |             |
| 0.09090136                    | 0.35526295  | -0.58329210 | -0.53686250 | -0.47994122 | 0.08194125  | -0.00402596 |             |
| 0.01452773                    | 0.08406391  | -0.22530846 | -0.45575732 | 0.79325635  | -0.32294523 | 0.02634956  |             |
| 0.00127237                    | 0.00964155  | -0.03436033 | -0.09658310 | 0.31697806  | 0.92773078  | -0.16803869 |             |
| 0.00005013                    | 0.00046334  | -0.00200356 | -0.00687832 | 0.03075892  | 0.16718324  | 0.98541976  |             |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

|                          |             |             |             |
|--------------------------|-------------|-------------|-------------|
| <i>KAPPA</i> = -0.300000 |             |             |             |
| <i>J</i> = 2, <i>E</i> + |             |             |             |
| 0.98454360               | -0.17513965 |             |             |
| 0.17513965               | 0.98454360  |             |             |
| <i>J</i> = 3, <i>E</i> + |             |             |             |
| 0.94145719               | -0.33713254 |             |             |
| 0.33713254               | 0.94145719  |             |             |
| <i>J</i> = 3, <i>O</i> + |             |             |             |
| 0.99615792               | -0.08757515 |             |             |
| 0.08757515               | 0.99615792  |             |             |
| <i>J</i> = 3, <i>O</i> - |             |             |             |
| 0.99283541               | -0.11948994 |             |             |
| 0.11948994               | 0.99283541  |             |             |
| <i>J</i> = 4, <i>E</i> + |             |             |             |
| 0.88504074               | -0.46520288 | 0.01700468  |             |
| 0.46455831               | 0.88029617  | -0.09625089 |             |
| 0.02980703               | 0.09308562  | 0.99521184  |             |
| <i>J</i> = 4, <i>O</i> + |             |             |             |
| 0.98713313               | -0.15990054 |             |             |
| 0.15990054               | 0.98713313  |             |             |
| <i>J</i> = 4, <i>O</i> - |             |             |             |
| 0.96636774               | -0.25716413 |             |             |
| 0.25716413               | 0.96636774  |             |             |
| <i>J</i> = 4, <i>E</i> - |             |             |             |
| 0.99572789               | -0.09233615 |             |             |
| 0.09233615               | 0.99572789  |             |             |
| <i>J</i> = 5, <i>E</i> + |             |             |             |
| 0.83355441               | -0.55010800 | 0.05067772  |             |
| 0.54870259               | 0.81377927  | -0.19154313 |             |
| 0.06412893               | 0.18746862  | 0.98017498  |             |
| <i>J</i> = 5, <i>O</i> + |             |             |             |
| 0.97364279               | -0.22790063 | 0.00900117  |             |
| 0.22778066               | 0.96959901  | -0.08940767 |             |
| 0.01164854               | 0.08910142  | 0.99595444  |             |
| <i>J</i> = 5, <i>O</i> - |             |             |             |
| 0.90847345               | -0.41777604 | 0.01179669  |             |
| 0.41707739               | 0.90441643  | -0.08987419 |             |
| 0.02687816               | 0.08656845  | 0.99588326  |             |
| <i>J</i> = 5, <i>E</i> - |             |             |             |
| 0.98454360               | -0.17513965 |             |             |
| 0.17513965               | 0.98454360  |             |             |
| <i>J</i> = 6, <i>E</i> + |             |             |             |
| 0.79186261               | -0.60059209 | 0.11063458  | -0.00165562 |
| 0.60212734               | 0.73759087  | -0.30546294 | 0.00973527  |
| 0.10187076               | 0.30805950  | 0.94189911  | -0.08687781 |
| 0.00431599               | 0.01866001  | 0.08531381  | 0.99617003  |
| <i>J</i> = 6, <i>O</i> + |             |             |             |
| 0.95747069               | -0.28757285 | 0.02348904  |             |
| 0.28732088               | 0.94284492  | -0.16879030 |             |
| 0.02639298               | 0.16836065  | 0.98537206  |             |
| <i>J</i> = 6, <i>O</i> - |             |             |             |
| 0.82589483               | -0.56277189 | 0.03443144  |             |
| 0.55965188               | 0.81083769  | -0.17126589 |             |
| 0.06846532               | 0.16071724  | 0.98462301  |             |



TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

| KAPPA = -0.30000 -CONTINUED |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 6, <i>E</i> -    |             |             |             |             |
| 0.96506081                  | -0.26185689 | 0.00941279  |             |             |
| 0.26166829                  | 0.96124473  | -0.08682323 |             |             |
| 0.01368727                  | 0.08625273  | 0.99617926  |             |             |
| <i>J</i> = 7, <i>E</i> +    |             |             |             |             |
| 0.75849486                  | -0.62091305 | 0.19778077  | -0.00594120 |             |
| 0.63645753                  | 0.64069248  | -0.42865191 | 0.02631530  |             |
| 0.13962781                  | 0.44852759  | 0.86775732  | -0.16224765 |             |
| 0.01055584                  | 0.05294460  | 0.15536259  | 0.98638122  |             |
| <i>J</i> = 7, <i>O</i> +    |             |             |             |             |
| 0.94028806                  | -0.33733228 | 0.04543620  | -0.00092236 |             |
| 0.33742424                  | 0.90622966  | -0.25457938 | 0.00905648  |             |
| 0.04472833                  | 0.25452217  | 0.96228646  | -0.08498594 |             |
| 0.00161861                  | 0.01316057  | 0.08443732  | 0.99634056  |             |
| <i>J</i> = 7, <i>O</i> -    |             |             |             |             |
| 0.74126538                  | -0.66688470 | 0.07608564  | -0.00118661 |             |
| 0.66005312                  | 0.70366366  | -0.26287760 | 0.00909339  |             |
| 0.12177021                  | 0.24481717  | 0.95812989  | -0.08499225 |             |
| 0.00524620                  | 0.01366757  | 0.08422265  | 0.99633941  |             |
| <i>J</i> = 7, <i>E</i> -    |             |             |             |             |
| 0.93796632                  | -0.34584145 | 0.02475647  |             |             |
| 0.34514245                  | 0.92448136  | -0.16189785 |             |             |
| 0.03310409                  | 0.16039924  | 0.98649694  |             |             |
| <i>J</i> = 8, <i>E</i> +    |             |             |             |             |
| 0.73122201                  | 0.61381038  | 0.29716527  | -0.01561975 | 0.00016564  |
| 0.65889533                  | -0.52322046 | -0.53771914 | 0.05435459  | -0.00099859 |
| 0.17551562                  | -0.58130831 | 0.75599411  | -0.24427731 | 0.00874206  |
| 0.01911072                  | -0.10741123 | 0.22558042  | 0.96447514  | -0.08365876 |
| 0.00060340                  | -0.00454432 | 0.01171818  | 0.08317395  | 0.99645560  |
| <i>J</i> = 8, <i>O</i> +    |             |             |             |             |
| 0.92318677                  | -0.37709173 | 0.07429004  | -0.00300076 |             |
| 0.37873792                  | 0.85963076  | -0.34211786 | 0.02340751  |             |
| 0.06531585                  | 0.34314839  | 0.92380220  | -0.15675626 |             |
| 0.00419668                  | 0.03295397  | 0.15500279  | 0.98735534  |             |
| <i>J</i> = 8, <i>O</i> -    |             |             |             |             |
| 0.66841126                  | 0.72964483  | 0.14431745  | -0.00415692 |             |
| 0.72173363                  | -0.58939985 | -0.36214707 | 0.02361961  |             |
| 0.17924986                  | -0.34469506 | 0.90800190  | -0.15680356 |             |
| 0.01401594                  | -0.03757064 | 0.15347483  | 0.98733858  |             |
| <i>J</i> = 8, <i>E</i> -    |             |             |             |             |
| 0.90560175                  | -0.42128205 | 0.04905070  | -0.00096883 |             |
| 0.41993563                  | 0.87440955  | -0.24286965 | 0.00873787  |             |
| 0.05945377                  | 0.24038068  | 0.96523764  | -0.08365804 |             |
| 0.00218957                  | 0.01210405  | 0.08321451  | 0.99645574  |             |
| <i>J</i> = 9, <i>E</i> +    |             |             |             |             |
| 0.70835578                  | -0.58995629 | 0.38598746  | -0.03459599 | 0.00067914  |
| 0.67366397                  | 0.40283309  | -0.61181272 | 0.09786078  | -0.00328995 |
| 0.20863911                  | 0.67730723  | 0.62262084  | -0.33102184 | 0.02219151  |
| 0.02959597                  | 0.17534149  | 0.29691813  | 0.92563973  | -0.15300377 |
| 0.00165341                  | 0.01368806  | 0.02969493  | 0.15113575  | 0.98797070  |
| <i>J</i> = 9, <i>O</i> +    |             |             |             |             |
| 0.90673634                  | -0.40755422 | 0.10806299  | -0.00715130 | 0.00009491  |
| 0.41255056                  | 0.80431226  | -0.42516363 | 0.04603097  | -0.00093431 |
| 0.08698642                  | 0.42797667  | 0.86875476  | -0.23337152 | 0.00849919  |
| 0.00803478                  | 0.06174291  | 0.22955937  | 0.96777743  | -0.08265954 |
| 0.00022500                  | 0.00226418  | 0.01122288  | 0.08230789  | 0.99654116  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.300000 —CONTINUED |             |             |             |             |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 9, <i>O</i> —     |             |             |             |             |             |
| 0.60907762                   | 0.75496045  | 0.24278108  | -0.01079332 | 0.00012098  |             |
| 0.75671075                   | -0.46176503 | -0.46039484 | 0.04687857  | -0.00093765 |             |
| 0.23597079                   | -0.45874714 | 0.82415462  | -0.23359314 | 0.00849967  |             |
| 0.02702449                   | -0.07967712 | 0.22302898  | 0.96765009  | -0.08265963 |             |
| 0.00086700                   | -0.00322234 | 0.01100746  | 0.08230099  | 0.99654114  |             |
| <i>J</i> = 9, <i>E</i> —     |             |             |             |             |             |
| 0.87072733                   | -0.48466087 | 0.08323413  | -0.00313656 |             |             |
| 0.48322682                   | 0.81186245  | -0.32692504 | 0.02216359  |             |             |
| 0.09104656                   | 0.32412416  | 0.92911022  | -0.15299757 |             |             |
| 0.00602339                   | 0.03044239  | 0.15148036  | 0.98797302  |             |             |
| <i>J</i> = 10, <i>E</i> +    |             |             |             |             |             |
| 0.68875563                   | -0.56235541 | -0.45249055 | -0.06797262 | 0.00202290  | -0.00001683 |
| 0.68330558                   | 0.29639956  | 0.64750820  | 0.16096184  | -0.00807428 | 0.00010319  |
| 0.23868805                   | 0.73082665  | -0.48196059 | -0.41806199 | 0.04310189  | -0.00090177 |
| 0.04154599                   | 0.24692389  | -0.37438422 | 0.86363419  | -0.22628694 | 0.00831829  |
| 0.00333162                   | 0.02870281  | -0.05942004 | 0.22072670  | 0.96964392  | -0.08188219 |
| 0.00008382                   | 0.00091837  | -0.00226795 | 0.01053061  | 0.08159549  | 0.99660689  |
| <i>J</i> = 10, <i>O</i> +    |             |             |             |             |             |
| 0.89117622                   | -0.42996927 | 0.14396684  | -0.01431094 | 0.00036044  |             |
| 0.44020611                   | 0.74306235  | -0.49792892 | 0.07832583  | -0.00296282 |             |
| 0.10886399                   | 0.50320881  | 0.79782819  | -0.31296824 | 0.02122692  |             |
| 0.01310532                   | 0.09860355  | 0.30664583  | 0.93462522  | -0.15016530 |             |
| 0.00064765                   | 0.00655768  | 0.02790790  | 0.14895246  | 0.98842850  |             |
| <i>J</i> = 10, <i>O</i> —    |             |             |             |             |             |
| 0.56078975                   | 0.74433105  | 0.36182449  | -0.02385270 | 0.00048544  |             |
| 0.77454257                   | -0.31814419 | -0.54063832 | 0.08105176  | -0.00298263 |             |
| 0.28925443                   | -0.56939668 | 0.70231662  | -0.31371950 | 0.02123051  |             |
| 0.04386594                   | -0.14292010 | 0.28779306  | 0.93395660  | -0.15016609 |             |
| 0.00251319                   | -0.01080848 | 0.02682851  | 0.14888523  | 0.98842819  |             |
| <i>J</i> = 10, <i>E</i> —    |             |             |             |             |             |
| 0.83555379                   | -0.53453568 | 0.12674790  | -0.00751202 | 0.00010029  |             |
| 0.53466258                   | 0.73810763  | -0.40924991 | 0.04297383  | -0.00090140 |             |
| 0.12585276                   | 0.40754490  | 0.87567588  | -0.22625385 | 0.00831824  |             |
| 0.01211426                   | 0.05806473  | 0.22255117  | 0.96966387  | -0.08188218 |             |
| 0.00034439                   | 0.00209044  | 0.01059323  | 0.08159658  | 0.99660689  |             |
| <i>J</i> = 11, <i>E</i> +    |             |             |             |             |             |
| 0.67165405                   | -0.53756965 | -0.49531702 | -0.12056239 | 0.00504558  | -0.00007667 |
| 0.68941502                   | 0.20857907  | 0.64851907  | 0.24563676  | -0.01694571 | 0.00039331  |
| 0.26567638                   | 0.75194733  | -0.33411098 | -0.49702336 | 0.07294540  | -0.00280374 |
| 0.05450970                   | 0.31566132  | -0.45943938 | 0.77108307  | -0.30217858 | 0.02052016  |
| 0.00569676                   | 0.04938295  | -0.10635440 | 0.28787620  | 0.93885715  | -0.14795995 |
| 0.00025240                   | 0.00284623  | -0.00762380 | 0.02555888  | 0.14697517  | 0.98877639  |
| <i>J</i> = 11, <i>O</i> +    |             |             |             |             |             |
| 0.87656988                   | -0.44591443 | 0.17928413  | -0.02533340 | 0.00099547  | -0.00000982 |
| 0.46288315                   | 0.67933580  | -0.55641307 | 0.12082070  | -0.00699334 | 0.00009709  |
| 0.13034723                   | 0.56522306  | 0.71290122  | -0.39198617 | 0.04062540  | -0.00087559 |
| 0.01929167                   | 0.14140252  | 0.38368144  | 0.88520007  | -0.22085220 | 0.00817687  |
| 0.00136672                   | 0.01382971  | 0.05309078  | 0.21777399  | 0.97106105  | -0.08125988 |
| 0.00003121                   | 0.00039346  | 0.00186305  | 0.01013680  | 0.08102114  | 0.99665902  |
| <i>J</i> = 11, <i>O</i> —    |             |             |             |             |             |
| 0.52084417                   | 0.70620878  | -0.47722827 | -0.04734612 | 0.00142595  | -0.00001244 |
| 0.78136139                   | -0.17158259 | 0.58611735  | 0.12825819  | -0.00707610 | 0.00009741  |
| 0.33777581                   | -0.64988283 | -0.55385952 | -0.39388671 | 0.04064395  | -0.00087563 |
| 0.06383679                   | -0.22099992 | -0.34558141 | 0.88250367  | -0.22085695 | 0.00817687  |
| 0.00529896                   | -0.02528418 | -0.05029362 | 0.21736200  | 0.97105807  | -0.08125989 |
| 0.00013519                   | -0.00079371 | -0.00181515 | 0.01012253  | 0.08102097  | 0.99665902  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

KAPPA = -0.300000 --CONTINUED

J = 11, E--

|            |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|
| 0.80146570 | -0.57095252 | 0.17729442  | -0.01524801 | 0.00037741  |
| 0.57530178 | 0.65531730  | -0.48407284 | 0.07247572  | -0.00280123 |
| 0.16203802 | 0.48524095  | 0.80413253  | -0.30205086 | 0.02051971  |
| 0.02057165 | 0.09526016  | 0.29484804  | 0.93897541  | -0.14795985 |
| 0.00103954 | 0.00625911  | 0.02599394  | 0.14698715  | 0.98877643  |

J = 12, E+

|            |             |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.65652011 | -0.51687408 | -0.51453966 | -0.19221570 | 0.01115866  | -0.00025243 | 0.00000173  |
| 0.69303227 | 0.13715570  | 0.61648788  | 0.34612855  | -0.03211056 | 0.00110172  | -0.00001072 |
| 0.28978244 | 0.75180978  | -0.17603054 | -0.55409878 | 0.11293168  | -0.00651247 | 0.00009387  |
| 0.06809352 | 0.37835712  | -0.54184149 | 0.64361666  | -0.37797386 | 0.03885343  | -0.00085528 |
| 0.00875853 | 0.07495030  | -0.17392191 | 0.34606156  | 0.89291756  | -0.21663683 | 0.00806344  |
| 0.00055570 | 0.00631408  | -0.01906583 | 0.04710673  | 0.21407728  | 0.97212528  | -0.08075046 |
| 0.00001162 | 0.00016144  | -0.00057849 | 0.00162533  | 0.00978489  | 0.08054595  | 0.99670136  |

J = 12, O+

|            |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|
| 0.86289668 | -0.45697769 | 0.21193812  | -0.04071415 | 0.00229972  | -0.00004198 |
| 0.48154752 | 0.61617723  | -0.59868158 | 0.17268376  | -0.01407708 | 0.00035785  |
| 0.15105204 | 0.61295872  | 0.61645922  | -0.46565856 | 0.06780756  | -0.06267551 |
| 0.02643132 | 0.18755899  | 0.45706642  | 0.81767392  | -0.29363898 | 0.01997027  |
| 0.00243981 | 0.02446825  | 0.08774490  | 0.28720732  | 0.94225012  | -0.14619453 |
| 0.00009797 | 0.00124546  | 0.00563425  | 0.02461915  | 0.14539441  | 0.98905058  |

J = 12, O-

|            |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|
| 0.48718017 | -0.65721762 | -0.56851112 | -0.08662059 | 0.00352956  | -0.00005560 |
| 0.78100485 | 0.04057683  | 0.59329731  | 0.19020230  | -0.01435976 | 0.00035983  |
| 0.38102557 | 0.68769743  | -0.39660052 | -0.46902494 | 0.06788392  | -0.00267583 |
| 0.08612679 | 0.30207540  | -0.40047571 | 0.80889870  | -0.29365951 | 0.01997033  |
| 0.00940339 | 0.04726458  | -0.08419253 | 0.28533867  | 0.94223047  | -0.14619455 |
| 0.00042501 | 0.00269581  | -0.00567938 | 0.02450097  | 0.14539240  | 0.98905058  |

J = 12, E-

|            |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|
| 0.76917081 | 0.59509261  | 0.23125019  | -0.02762811 | 0.00103964  | -0.00001043 |
| 0.60672962 | -0.56686822 | -0.54595870 | 0.11147381  | -0.00650073 | 0.00009383  |
| 0.19816948 | -0.55182647 | 0.71562662  | -0.37760406 | 0.03885083  | -0.00085528 |
| 0.03129008 | -0.14079917 | 0.36597142  | 0.89345688  | -0.21663617 | 0.00806344  |
| 0.00228343 | -0.01371829 | 0.04891946  | 0.21415988  | 0.97212571  | -0.08075046 |
| 0.00005284 | -0.00038628 | 0.00167049  | 0.00978776  | 0.08054597  | 0.99670136  |

J = 13, E+

|            |             |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.64297373 | -0.49970043 | 0.51193652  | 0.27257287  | 0.02255521  | -0.00069268 | 0.00000858  |
| 0.69485789 | 0.07862759  | -0.55649378 | -0.44508893 | -0.05651470 | 0.00260942  | -0.00004581 |
| 0.31125582 | 0.73829731  | 0.01627669  | 0.57511564  | 0.16384770  | -0.01295264 | 0.00033925  |
| 0.08197546 | 0.43360104  | 0.60021182  | -0.48837065 | -0.44985931 | 0.06426507  | -0.00257758 |
| 0.01248955 | 0.10434574  | 0.25725508  | -0.39067083 | 0.82908400  | -0.28703718 | 0.01953162  |
| 0.00103216 | 0.01166530  | 0.03913563  | -0.07542606 | 0.28132259  | 0.94474723  | -0.14474957 |
| 0.00003789 | 0.00053127  | 0.00217528  | -0.00481577 | 0.02356284  | 0.14407383  | 0.98927211  |

J = 13, O+

|            |             |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.85009999 | -0.46450583 | -0.24063262 | -0.06031762 | 0.00469559  | -0.00012992 | 0.00000102  |
| 0.49696938 | 0.55566610  | 0.62454233  | 0.23141808  | -0.02546048 | 0.00096958  | -0.00001013 |
| 0.17075283 | 0.64723031  | -0.51162874 | -0.52859781 | 0.10353429  | -0.00611725 | 0.00009118  |
| 0.03434562 | 0.23467213  | -0.52225634 | 0.73176033  | -0.36622298 | 0.03747714  | -0.00083895 |
| 0.00390422 | 0.03851381  | -0.13178766 | 0.35470017  | 0.89987715  | -0.21325765 | 0.00797040  |
| 0.00022428 | 0.00285045  | -0.01261167 | 0.04587033  | 0.21123866  | 0.97296181  | -0.08032575 |
| 0.00000432 | 0.00006617  | -0.00034870 | 0.00152696  | 0.00950961  | 0.08014721  | 0.99673644  |

J = 13, O-

|            |             |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.45833813 | -0.60998954 | 0.62931492  | -0.14744818 | 0.00778743  | -0.00018056 | 0.00000129  |
| 0.77592801 | -0.06684801 | -0.56706251 | 0.26686053  | -0.02629982 | 0.00097825  | -0.00001016 |
| 0.41898835 | 0.68930535  | 0.23722712  | -0.53124233 | 0.10379946  | -0.00611887 | 0.00009119  |
| 0.10994314 | 0.37747796  | 0.45630239  | 0.70826378  | -0.36628974 | 0.03747750  | -0.00083895 |
| 0.01490654 | 0.07597236  | 0.13313533  | 0.34805051  | 0.89977743  | -0.21325774 | 0.00797040  |
| 0.00097058 | 0.00638751  | 0.01375079  | 0.04524448  | 0.21122338  | 0.97296175  | -0.08032575 |
| 0.00002055 | 0.00016201  | 0.00039931  | 0.00151066  | 0.00950908  | 0.08014720  | 0.99673644  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.300000—CONTINUED |             |             |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 13, <i>E</i> —   |             |             |             |             |             |             |             |
| 0.73894460                  | 0.60896514  | 0.28463055  | -0.04584721 | 0.00240971  | -0.00004413 |             |             |
| 0.63056220                  | -0.47682393 | -0.59100483 | 0.15992755  | -0.01290789 | 0.00033900  |             |             |
| 0.23323067                  | -0.60351249 | 0.61282543  | -0.44909465 | 0.06425321  | -0.00257754 |             |             |
| 0.04402083                  | -0.19218612 | 0.43319669  | 0.83108199  | -0.28703402 | 0.01953161  |             |             |
| 0.00421636                  | -0.02521780 | 0.08036899  | 0.28174715  | 0.94475035  | -0.14474957 |             |             |
| 0.00017238                  | -0.00127732 | 0.00501868  | 0.02358968  | 0.14407415  | 0.98927212  |             |             |
| <i>J</i> = 14, <i>E</i> +   |             |             |             |             |             |             |             |
| 0.63073424                  | -0.48522732 | 0.49523791  | 0.34593074  | 0.04239444  | -0.00167833 | 0.00003072  | -0.00000018 |
| 0.69537667                  | 0.03003901  | -0.48270665 | -0.52316419 | -0.09387169 | 0.00552661  | -0.00014276 | 0.00000112  |
| 0.33036593                  | 0.71650050  | -0.12697372 | 0.55666181  | 0.22571864  | -0.02325846 | 0.00090377  | -0.00000982 |
| 0.09590372                  | 0.48094183  | 0.61880977  | -0.32285188 | -0.51265248 | 0.09742749  | -0.00582053 | 0.00008904  |
| 0.01683706                  | 0.13640908  | 0.34350110  | -0.42410267 | 0.74454310  | -0.35718905 | 0.03638480  | -0.00082553 |
| 0.00171404                  | 0.01910664  | 0.06827139  | -0.11200009 | 0.34553310  | 0.90480137  | -0.21049004 | 0.00789272  |
| 0.00008995                  | 0.00126062  | 0.00564219  | -0.01087420 | 0.04347169  | 0.20880103  | 0.97363549  | -0.07996623 |
| 0.00000161                  | 0.00002679  | 0.00014064  | -0.00030181 | 0.00141627  | 0.00928193  | 0.07980796  | 0.99676598  |
| <i>J</i> = 14, <i>O</i> +   |             |             |             |             |             |             |             |
| 0.83811080                  | -0.46951762 | -0.26478803 | -0.08327466 | 0.00871796  | -0.00033516 | 0.00000480  |             |
| 0.50975729                  | 0.49892956  | 0.63521984  | 0.29309317  | -0.04247387 | 0.00221969  | -0.00004204 |             |
| 0.18933391                  | 0.66979227  | -0.40240567 | -0.57580474 | 0.14800572  | -0.01198994 | 0.00032388  |             |
| 0.04285893                  | 0.28083055  | -0.57456744 | 0.62909001  | -0.43546100 | 0.06150457  | -0.00249940 |             |
| 0.00577781                  | 0.05572479  | -0.18372527 | 0.41744644  | 0.84208582  | -0.28172453 | 0.01917335  |             |
| 0.00043217                  | 0.00545099  | -0.02384545 | 0.07466126  | 0.27741776  | 0.94671084  | -0.14354497 |             |
| 0.00001461                  | 0.00022460  | -0.00119059 | 0.00453276  | 0.02277836  | 0.14296245  | 0.98945483  |             |
| <i>J</i> = 14, <i>O</i> —   |             |             |             |             |             |             |             |
| 0.43328463                  | -0.56893835 | 0.65906270  | -0.23229435 | 0.01578050  | -0.00049100 | 0.00000629  |             |
| 0.76774443                  | -0.15216737 | -0.51051574 | 0.35324646  | -0.04471158 | 0.00225067  | -0.00004224 |             |
| 0.45193147                  | 0.66658331  | 0.07423830  | -0.56888199 | 0.14880380  | -0.01199675 | 0.00032391  |             |
| 0.13458130                  | 0.44333616  | 0.50824720  | 0.57747144  | -0.43561814 | 0.06150635  | -0.00249941 |             |
| 0.02180079                  | 0.11009184  | 0.20084686  | 0.39863922  | 0.84167407  | -0.28172500 | 0.01917335  |             |
| 0.00185993                  | 0.01238729  | 0.02901070  | 0.07227392  | 0.27733063  | 0.94671037  | -0.14354497 |             |
| 0.00006941                  | 0.00056255  | 0.00155034  | 0.00442192  | 0.02277287  | 0.14296240  | 0.98945483  |             |
| <i>J</i> = 14, <i>E</i> —   |             |             |             |             |             |             |             |
| 0.71082307                  | -0.61493293 | -0.33401976 | -0.07066952 | 0.00496471  | -0.00013579 | 0.00000109  |             |
| 0.64823935                  | 0.38893153  | 0.61732308  | 0.21655323  | -0.02311097 | 0.00090259  | -0.00000981 |             |
| 0.26655796                  | 0.63890348  | -0.49921994 | -0.51187060 | 0.09738195  | -0.00582032 | 0.00008904  |             |
| 0.05843628                  | 0.24636178  | -0.49335385 | 0.75072807  | -0.35717767 | 0.03638475  | -0.00082553 |             |
| 0.00694209                  | 0.04109376  | -0.12082024 | 0.34727550  | 0.90481875  | -0.21049003 | 0.00789272  |             |
| 0.00040805                  | 0.00304475  | -0.01126168 | 0.04363573  | 0.20880370  | 0.97363550  | -0.07996623 |             |
| 0.00000796                  | 0.00007034  | -0.00030434 | 0.00142056  | 0.00928202  | 0.07980796  | 0.99676598  |             |
| <i>J</i> = 15, <i>E</i> +   |             |             |             |             |             |             |             |
| 0.61958314                  | -0.47279018 | 0.47418306  | -0.40266962 | 0.07465819  | -0.00370446 | 0.00009136  | -0.00000095 |
| 0.69493174                  | -0.01081497 | -0.40990531 | 0.57171267  | -0.14818484 | 0.01078395  | -0.00037351 | 0.00000525  |
| 0.34737532                  | 0.68970660  | -0.24229444 | -0.50521663 | 0.29694878  | -0.03875576 | 0.00204000  | -0.00003997 |
| 0.10968842                  | 0.52050221  | 0.59979593  | 0.15900273  | -0.55916530 | 0.13862051  | -0.01128256 | 0.00031179  |
| 0.02173307                  | 0.17001364  | 0.42133167  | 0.45192188  | 0.63656006  | -0.42442333 | 0.05932507  | -0.00243568 |
| 0.00262587                  | 0.02870277  | 0.10492244  | 0.16052460  | 0.40190970  | 0.85063090  | -0.27736577 | 0.01887526  |
| 0.00017937                  | 0.00249556  | 0.01170204  | 0.02175610  | 0.06975507  | 0.27377932  | 0.94828746  | -0.14252534 |
| 0.00000562                  | 0.00009387  | 0.00052500  | 0.00110997  | 0.00413622  | 0.02211585  | 0.14201424  | 0.98960811  |
| <i>J</i> = 15, <i>O</i> +   |             |             |             |             |             |             |             |
| 0.82685885                  | -0.47273627 | -0.28443099 | 0.10816414  | 0.01496062  | -0.00076265 | 0.00001631  | -0.00000011 |
| 0.52039197                  | 0.44640806  | 0.63305638  | -0.35317610 | -0.06631526 | 0.00453577  | -0.00012720 | 0.00000106  |
| 0.20675318                  | 0.68265478  | -0.29336058 | 0.60373223  | 0.20057665  | -0.02123269 | 0.00084921  | -0.00000955 |
| 0.05180956                  | 0.32467078  | -0.61048814 | -0.51296305 | -0.49746360 | 0.09260971  | -0.00558523 | 0.00008727  |
| 0.00806153                  | 0.07566919  | -0.24076683 | -0.47267424 | 0.76756647  | -0.34985809 | 0.03549570  | -0.00081430 |
| 0.00074289                  | 0.00924536  | -0.04006378 | -0.11144822 | 0.34170313  | 0.90869490  | -0.20818128 | 0.00782687  |
| 0.00003588                  | 0.00055026  | -0.00294032 | -0.01008712 | 0.04190865  | 0.20674061  | 0.97418987  | -0.07965796 |
| 0.00000060                  | 0.00001078  | -0.00006714 | -0.00026607 | 0.00133862  | 0.00909229  | 0.07951594  | 0.99679119  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

|                                     |             |             |             |             |             |             |             |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>KAPPA</i> = -0.300000 —CONTINUED |             |             |             |             |             |             |             |
| <i>J</i> = 15, <i>O</i> —           |             |             |             |             |             |             |             |
| 0.41127200                          | -0.53412694 | 0.65831572  | 0.33359902  | 0.02990741  | -0.00118367 | 0.00002222  | -0.00000013 |
| 0.75753796                          | -0.21967472 | -0.42723673 | -0.43609202 | -0.07176559 | 0.00463215  | -0.00012813 | 0.00000106  |
| 0.48026546                          | 0.62903062  | -0.08757018 | 0.56961969  | 0.20267669  | -0.02125734 | 0.00084937  | -0.00000955 |
| 0.15945530                          | 0.49837802  | 0.54091307  | -0.42110564 | -0.49766183 | 0.09261719  | -0.00558526 | 0.00008727  |
| 0.03000957                          | 0.14814086  | 0.28436090  | -0.43088681 | 0.76613743  | -0.34985994 | 0.03549571  | -0.00081430 |
| 0.00317228                          | 0.02106191  | 0.05434734  | -0.10479632 | 0.34130419  | 0.90869201  | -0.20818128 | 0.00782687  |
| 0.00016995                          | 0.00139295  | 0.00435055  | -0.00964968 | 0.04187131  | 0.20674017  | 0.97418986  | -0.07965796 |
| 0.00000307                          | 0.00002951  | 0.00010558  | -0.00025745 | 0.00133765  | 0.00909228  | 0.07951594  | 0.99679119  |
| <i>J</i> = 15, <i>E</i> —           |             |             |             |             |             |             |             |
| 0.68472293                          | -0.61522052 | -0.37703865 | -0.10204142 | 0.00935467  | -0.00034975 | 0.00000507  |             |
| 0.66096901                          | 0.30589278  | 0.62488140  | 0.27856808  | -0.03832095 | 0.00203537  | -0.00003994 |             |
| 0.29775902                          | 0.65870441  | -0.37881638 | -0.56093239 | 0.13846915  | -0.01128156 | 0.00031179  |             |
| 0.07417987                          | 0.30042260  | -0.54272854 | 0.65272830  | -0.42439339 | 0.05932481  | -0.00243568 |             |
| 0.01052343                          | 0.06125020  | -0.16983353 | 0.40779783  | 0.85070980  | -0.27736571 | 0.01887526  |             |
| 0.00080939                          | 0.00603650  | -0.02155090 | 0.07050903  | 0.27379595  | 0.94828753  | -0.14252534 |             |
| 0.00002779                          | 0.00024852  | -0.00105378 | 0.00417176  | 0.02211689  | 0.14201425  | 0.98960811  |             |
| <i>KAPPA</i> = -0.400000            |             |             |             |             |             |             |             |
| <i>J</i> = 2, <i>E</i> +            |             |             |             |             |             |             |             |
| 0.98902091                          | -0.14777565 |             |             |             |             |             |             |
| 0.14777565                          | 0.98902091  |             |             |             |             |             |             |
| <i>J</i> = 3, <i>E</i> +            |             |             |             |             |             |             |             |
| 0.95540384                          | -0.29530240 |             |             |             |             |             |             |
| 0.29530240                          | 0.95540384  |             |             |             |             |             |             |
| <i>J</i> = 3, <i>O</i> +            |             |             |             |             |             |             |             |
| 0.99719759                          | -0.07481283 |             |             |             |             |             |             |
| 0.07481283                          | 0.99719759  |             |             |             |             |             |             |
| <i>J</i> = 3, <i>O</i> —            |             |             |             |             |             |             |             |
| 0.99527770                          | -0.09706852 |             |             |             |             |             |             |
| 0.09706852                          | 0.99527770  |             |             |             |             |             |             |
| <i>J</i> = 4, <i>E</i> +            |             |             |             |             |             |             |             |
| 0.90542706                          | -0.42434082 | 0.01169195  |             |             |             |             |             |
| 0.42387096                          | 0.90223732  | -0.07938022 |             |             |             |             |             |
| 0.02313535                          | 0.07682888  | 0.99677584  |             |             |             |             |             |
| <i>J</i> = 4, <i>O</i> +            |             |             |             |             |             |             |             |
| 0.99025885                          | -0.13923867 |             |             |             |             |             |             |
| 0.13923867                          | 0.99025885  |             |             |             |             |             |             |
| <i>J</i> = 4, <i>O</i> —            |             |             |             |             |             |             |             |
| 0.97779538                          | -0.20956190 |             |             |             |             |             |             |
| 0.20956190                          | 0.97779538  |             |             |             |             |             |             |
| <i>J</i> = 4, <i>E</i> —            |             |             |             |             |             |             |             |
| 0.99702180                          | -0.07712027 |             |             |             |             |             |             |
| 0.07712027                          | 0.99702180  |             |             |             |             |             |             |
| <i>J</i> = 5, <i>E</i> +            |             |             |             |             |             |             |             |
| 0.85514680                          | -0.51720533 | 0.03496566  |             |             |             |             |             |
| 0.51576866                          | 0.84212222  | -0.15752095 |             |             |             |             |             |
| 0.05202532                          | 0.15273773  | 0.98689642  |             |             |             |             |             |
| <i>J</i> = 5, <i>O</i> +            |             |             |             |             |             |             |             |
| 0.97926831                          | -0.20246777 | 0.00635506  |             |             |             |             |             |
| 0.20237477                          | 0.97648698  | -0.07428077 |             |             |             |             |             |
| 0.00883383                          | 0.07402691  | 0.99721712  |             |             |             |             |             |
| <i>J</i> = 5, <i>O</i> —            |             |             |             |             |             |             |             |
| 0.93695781                          | -0.34935211 | 0.00794792  |             |             |             |             |             |
| 0.34894696                          | 0.93417621  | -0.07450393 |             |             |             |             |             |
| 0.01860335                          | 0.07258044  | 0.99718905  |             |             |             |             |             |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.400000 —CONTINUED |             |             |             |             |
|------------------------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 5, <i>E</i> —     |             |             |             |             |
| 0.98902091                   | -0.14777565 |             |             |             |
| 0.14777565                   | 0.98902091  |             |             |             |
| <i>J</i> = 6, <i>E</i> +     |             |             |             |             |
| 0.81235467                   | -0.57801452 | 0.07731890  | -0.00094370 |             |
| 0.57686391                   | 0.77705223  | -0.25174092 | 0.00666148  |             |
| 0.08543050                   | 0.24887539  | 0.96206348  | -0.07208691 |             |
| 0.00309038                   | 0.01225102  | 0.07128920  | 0.99737566  |             |
| <i>J</i> = 6, <i>O</i> +     |             |             |             |             |
| 0.96536766                   | -0.26034952 | 0.01683452  |             |             |
| 0.26007805                   | 0.95524888  | -0.14092190 |             |             |
| 0.02060779                   | 0.14041973  | 0.98987758  |             |             |
| <i>J</i> = 6, <i>O</i> —     |             |             |             |             |
| 0.87030390                   | -0.49197400 | 0.02308057  |             |             |
| 0.48996274                   | 0.86007775  | -0.14213647 |             |             |
| 0.05007636                   | 0.13501054  | 0.98957795  |             |             |
| <i>J</i> = 6, <i>E</i> —     |             |             |             |             |
| 0.97449543                   | -0.22431292 | 0.00650919  |             |             |
| 0.22419154                   | 0.97187692  | -0.07206527 |             |             |
| 0.00983904                   | 0.07168658  | 0.99737868  |             |             |
| <i>J</i> = 7, <i>E</i> +     |             |             |             |             |
| 0.77748363                   | -0.61240960 | 0.14304606  | -0.00339149 |             |
| 0.61728057                   | 0.69961642  | -0.35941408 | 0.01797456  |             |
| 0.12009462                   | 0.36641187  | 0.91274689  | -0.13495459 |             |
| 0.00782168                   | 0.03512394  | 0.13134862  | 0.99068293  |             |
| <i>J</i> = 7, <i>O</i> +     |             |             |             |             |
| 0.94994228                   | -0.31065296 | 0.03322823  | -0.00053877 |             |
| 0.31035786                   | 0.92608825  | -0.21447536 | 0.00623516  |             |
| 0.03586693                   | 0.21394204  | 0.97363649  | -0.07052908 |             |
| 0.00110911                   | 0.00917047  | 0.07020108  | 0.99749009  |             |
| <i>J</i> = 7, <i>O</i> —     |             |             |             |             |
| 0.79146376                   | -0.60909787 | 0.05083757  | -0.00066361 |             |
| 0.60389303                   | 0.76643653  | -0.21874458 | 0.00624961  |             |
| 0.09426931                   | 0.20369160  | 0.97193024  | -0.07053116 |             |
| 0.00340861                   | 0.00919555  | 0.07012820  | 0.99748978  |             |
| <i>J</i> = 7, <i>E</i> —     |             |             |             |             |
| 0.95319351                   | -0.30186918 | 0.01723761  |             |             |
| 0.30137281                   | 0.94392796  | -0.13481257 |             |             |
| 0.02442469                   | 0.13369742  | 0.99072117  |             |             |
| <i>J</i> = 8, <i>E</i> +     |             |             |             |             |
| 0.74889107                   | 0.62202905  | 0.22839042  | -0.00893519 | 0.00007828  |
| 0.64438429                   | -0.60326292 | -0.46847656 | 0.03704223  | -0.00056672 |
| 0.15400796                   | -0.49356447 | 0.83126270  | -0.20406329 | 0.00601276  |
| 0.01457541                   | -0.07443842 | 0.19314109  | 0.97576801  | -0.06942473 |
| 0.00039340                   | -0.00259707 | 0.00814702  | 0.06915924  | 0.99756891  |
| <i>J</i> = 8, <i>O</i> +     |             |             |             |             |
| 0.93408690                   | -0.35266363 | 0.05573946  | -0.00177104 |             |
| 0.35298433                   | 0.88866088  | -0.29227106 | 0.01617216  |             |
| 0.05361831                   | 0.29217524  | 0.94590776  | -0.13045003 |             |
| 0.00296603                   | 0.02332051  | 0.12934157  | 0.99132140  |             |
| <i>J</i> = 8, <i>O</i> —     |             |             |             |             |
| 0.71677327                   | 0.69055597  | 0.09676344  | -0.00231790 |             |
| 0.68195141                   | -0.66526147 | -0.30348842 | 0.01625524  |             |
| 0.14521057                   | -0.28275441 | 0.93911792  | -0.13046593 |             |
| 0.00960456                   | -0.02468958 | 0.12879884  | 0.99131682  |             |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.400000 —CONTINUED |             |             |             |             |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 8, <i>E</i> -     |             |             |             |             |             |
| 0.92626218                   | -0.37529465 | 0.03452517  | -0.00055506 |             |             |
| 0.37416461                   | 0.90474634  | -0.20346690 | 0.00601140  |             |             |
| 0.04513593                   | 0.20129160  | 0.97602494  | -0.06942454 |             |             |
| 0.00140183                   | 0.00834777  | 0.06917052  | 0.99756894  |             |             |
| <i>J</i> = 9, <i>E</i> +     |             |             |             |             |             |
| 0.72496959                   | 0.61048242  | 0.31833246  | -0.01986579 | 0.00032151  |             |
| 0.66276971                   | -0.49308894 | -0.55961316 | 0.06655248  | -0.00186617 |             |
| 0.18606116                   | -0.60611739 | 0.72125121  | -0.27850610 | 0.01529700  |             |
| 0.02313903                   | -0.12932917 | 0.25471075  | 0.94955584  | -0.12729768 |             |
| 0.00111230                   | -0.00837715 | 0.02041294  | 0.12630986  | 0.99174478  |             |
| <i>J</i> = 9, <i>O</i> +     |             |             |             |             |             |
| 0.91848467                   | -0.38650713 | 0.08354554  | -0.00427763 | 0.00004591  |             |
| 0.38864056                   | 0.84321723  | -0.37002640 | 0.03199047  | -0.00053316 |             |
| 0.07287195                   | 0.37094463  | 0.90496523  | -0.19517561 | 0.00584658  |             |
| 0.00583875                   | 0.04466715  | 0.19255835  | 0.97784805  | -0.06859472 |             |
| 0.00013982                   | 0.00136573  | 0.00773477  | 0.06839586  | 0.99762733  |             |
| <i>J</i> = 9, <i>O</i> -     |             |             |             |             |             |
| 0.65313054                   | 0.73876360  | 0.16617103  | -0.00600246 | 0.00005613  |             |
| 0.73069614                   | -0.55735273 | -0.39293256 | 0.03232331  | -0.00053424 |             |
| 0.19781346                   | -0.37535645 | 0.88420551  | -0.19525316 | 0.00584671  |             |
| 0.01931840                   | -0.05187385 | 0.19003438  | 0.97781266  | -0.06859474 |             |
| 0.00052353                   | -0.00170695 | 0.00766461  | 0.06839428  | 0.99762733  |             |
| <i>J</i> = 9, <i>E</i> -     |             |             |             |             |             |
| 0.89568628                   | -0.44068019 | 0.05952976  | -0.00180604 |             |             |
| 0.43894664                   | 0.85473033  | -0.27663728 | 0.01528794  |             |             |
| 0.07110554                   | 0.27347907  | 0.95076230  | -0.12729595 |             |             |
| 0.00399145                   | 0.02112420  | 0.12640838  | 0.99174531  |             |             |
| <i>J</i> = 10, <i>E</i> +    |             |             |             |             |             |
| 0.70453331                   | -0.58729731 | -0.39643771 | -0.03938147 | 0.00095978  | -0.00000659 |
| 0.67527042                   | 0.38422413  | 0.61996524  | 0.10956198  | -0.00457732 | 0.00004856  |
| 0.21572174                   | 0.68544233  | -0.59662389 | -0.35606738 | 0.02980986  | -0.00051415 |
| 0.03318865                   | 0.19305567  | -0.31769918 | 0.90824019  | -0.18910916 | 0.00572202  |
| 0.00230508                   | 0.01875517  | -0.03982324 | 0.18630059  | 0.97914866  | -0.06794874 |
| 0.00004960                   | 0.00050077  | -0.00123039 | 0.00729024  | 0.06778735  | 0.99767227  |
| <i>J</i> = 10, <i>O</i> +    |             |             |             |             |             |
| 0.90349365                   | -0.41281177 | 0.11493376  | -0.00871044 | 0.00017577  |             |
| 0.41831871                   | 0.79105849  | -0.44296098 | 0.05494197  | -0.00169560 |             |
| 0.09280735                   | 0.44545180  | 0.85036839  | -0.26385381 | 0.01463724  |             |
| 0.00976281                   | 0.07327314  | 0.25899288  | 0.95490950  | -0.12492509 |             |
| 0.00041497                   | 0.00407976  | 0.01928960  | 0.12423577  | 0.99205674  |             |
| <i>J</i> = 10, <i>O</i> -    |             |             |             |             |             |
| 0.60053901                   | 0.75599256  | 0.26010163  | -0.01323748 | 0.00022481  |             |
| 0.75915007                   | -0.43731210 | -0.47886121 | 0.05602097  | -0.00170204 |             |
| 0.24897405                   | -0.47762858 | 0.79993827  | -0.26413511 | 0.01463820  |             |
| 0.03245754                   | -0.09523601 | 0.25056305  | 0.95471904  | -0.12492527 |             |
| 0.00157988                   | -0.00586664 | 0.01886836  | 0.12422004  | 0.99205668  |             |
| <i>J</i> = 10, <i>E</i> -    |             |             |             |             |             |
| 0.86349588                   | -0.49575157 | 0.09266205  | -0.00435675 | 0.00004762  |             |
| 0.49408746                   | 0.79463948  | -0.35148152 | 0.02976822  | -0.00051404 |             |
| 0.10091370                   | 0.34801642  | 0.91263881  | -0.18909958 | 0.00572201  |             |
| 0.00829609                   | 0.04076241  | 0.18684620  | 0.97915324  | -0.06794873 |             |
| 0.00019961                   | 0.00121331  | 0.00730575  | 0.06778755  | 0.99767227  |             |
| <i>J</i> = 11, <i>E</i> +    |             |             |             |             |             |
| 0.68675764                   | -0.56195170 | -0.45548523 | -0.07142606 | 0.00240047  | -0.00003009 |
| 0.68368257                   | 0.28816135  | 0.64874423  | 0.16905595  | -0.00959980 | 0.00018511  |
| 0.24281049                   | 0.73025031  | -0.46669169 | -0.43290297 | 0.05068399  | -0.00160191 |
| 0.04437111                   | 0.25835468  | -0.38600571 | 0.84700758  | -0.25428654 | 0.01414846  |
| 0.00404218                   | 0.03402887  | -0.06961631 | 0.24733038  | 0.95794484  | -0.12307983 |
| 0.00015399                   | 0.00164517  | -0.00401934 | 0.01786829  | 0.12252862  | 0.99229460  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.400000—CONTINUED |             |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 11, <i>O</i> +   |             |             |             |             |             |             |
| 0.88926780                  | -0.43257374 | 0.14776273  | -0.01576952 | 0.00049027  | -0.00000393 |             |
| 0.44301305                  | 0.73444613  | -0.50688061 | 0.08593138  | -0.00401949 | 0.00004592  |             |
| 0.11280748                  | 0.51155681  | 0.78288684  | -0.33448673 | 0.02811904  | -0.00049928 |             |
| 0.01469283                  | 0.10816286  | 0.32705468  | 0.92034881  | -0.18451718 | 0.00562474  |             |
| 0.00090048                  | 0.00890033  | 0.03688529  | 0.18274286  | 0.98011095  | -0.06743159 |             |
| 0.00001759                  | 0.00021224  | 0.00106482  | 0.00699093  | 0.06729677  | 0.99770792  |             |
| <i>J</i> = 11, <i>O</i> --  |             |             |             |             |             |             |
| 0.55694547                  | 0.74355467  | 0.36911847  | -0.02625482 | 0.00065947  | -0.00000479 |             |
| 0.77410909                  | -0.30482549 | -0.54764136 | 0.08893318  | -0.00404639 | 0.00004601  |             |
| 0.29696817                  | -0.57422348 | 0.68473953  | -0.33528774 | 0.02812404  | -0.00049929 |             |
| 0.04862986                  | -0.15576437 | 0.30613349  | 0.91955219  | -0.18451832 | 0.00562474  |             |
| 0.00344981                  | -0.01458031 | 0.03540462  | 0.18264347  | 0.98011039  | -0.06743159 |             |
| 0.00007459                  | -0.00037702 | 0.00103669  | 0.00698809  | 0.06729675  | 0.99770792  |             |
| <i>J</i> = 11, <i>E</i> --  |             |             |             |             |             |             |
| 0.83126330                  | -0.53959639 | 0.13325621  | -0.00893332 | 0.00017994  |             |             |
| 0.53952763                  | 0.72557772  | -0.42413563 | 0.05053035  | -0.00160124 |             |             |
| 0.13304121                  | 0.42156900  | 0.86008013  | -0.25424713 | 0.01414836  |             |             |
| 0.01452262                  | 0.06810694  | 0.24958055  | 0.95797257  | -0.12307981 |             |             |
| 0.00062427                  | 0.00370555  | 0.01798507  | 0.12253093  | 0.99229461  |             |             |
| <i>J</i> = 12, <i>E</i> +   |             |             |             |             |             |             |
| 0.67106729                  | -0.53906074 | -0.49473952 | -0.11952671 | 0.00532687  | -0.00009931 | 0.00000056  |
| 0.68918437                  | 0.20774475  | 0.64877459  | 0.24622736  | -0.01817614 | 0.00051864  | -0.00000418 |
| 0.26735306                  | 0.74865782  | -0.33088370 | -0.50229766 | 0.07894878  | -0.00373181 | 0.00004436  |
| 0.05635068                  | 0.32070214  | -0.46017770 | 0.76042398  | -0.32131542 | 0.02688419  | -0.00048770 |
| 0.00635758                  | 0.05387556  | -0.11391227 | 0.30564638  | 0.92622282  | -0.18094698 | 0.00554669  |
| 0.00034862                  | 0.00382721  | -0.01003670 | 0.03342587  | 0.17952857  | 0.98083974  | -0.06700822 |
| 0.00000624                  | 0.00008217  | -0.00024803 | 0.00094085  | 0.00674741  | 0.06689265  | 0.99773689  |
| <i>J</i> = 12, <i>O</i> +   |             |             |             |             |             |             |
| 0.87584806                  | -0.44699931 | 0.18000171  | -0.02607414 | 0.00114645  | -0.00001694 |             |
| 0.46360100                  | 0.67599223  | -0.55889068 | 0.12523388  | -0.00814116 | 0.00016970  |             |
| 0.13243872                  | 0.56671180  | 0.70404961  | -0.40420591 | 0.04719238  | -0.00152907 |             |
| 0.02053163                  | 0.14764106  | 0.39466199  | 0.87226764  | -0.24694547 | 0.01376887  |             |
| 0.00164891                  | 0.01629405  | 0.06153141  | 0.24313139  | 0.96023202  | -0.12160293 |             |
| 0.00005691                  | 0.00069805  | 0.00324720  | 0.01704373  | 0.12115155  | 0.99248213  |             |
| <i>J</i> = 12, <i>O</i> --  |             |             |             |             |             |             |
| 0.52030059                  | 0.70854019  | -0.47427344 | -0.04816787 | 0.00163083  | -0.00002137 |             |
| 0.78006414                  | -0.17081111 | 0.58708973  | 0.13259465  | -0.00823305 | 0.00017024  |             |
| 0.34091110                  | -0.64505318 | -0.54828385 | -0.40600423 | 0.04721304  | -0.00152914 |             |
| 0.06728233                  | -0.22768071 | -0.35549201 | 0.86953193  | -0.24695070 | 0.01376888  |             |
| 0.00631549                  | -0.02933164 | -0.05822909 | 0.24265954  | 0.96022821  | -0.12160294 |             |
| 0.00024303                  | -0.00138447 | -0.00315833 | 0.01701914  | 0.12115124  | 0.99248213  |             |
| <i>J</i> = 12, <i>E</i> --  |             |             |             |             |             |             |
| 0.79999113                  | -0.57230858 | 0.17946429  | -0.01641348 | 0.00049842  | -0.00000410 |             |
| 0.57610151                  | 0.64931158  | -0.49023554 | 0.07846481  | -0.00372865 | 0.00004436  |             |
| 0.16614325                  | 0.49004804  | 0.79269451  | -0.32118810 | 0.02688361  | -0.00048770 |             |
| 0.02270794                  | 0.10315336  | 0.31295530  | 0.92635316  | -0.18094685 | 0.00554669  |             |
| 0.00141704                  | 0.00834413  | 0.03398790  | 0.17954486  | 0.98083981  | -0.06700822 |             |
| 0.00002782                  | 0.00019525  | 0.00095284  | 0.00674787  | 0.06689265  | 0.99773689  |             |
| <i>J</i> = 13, <i>E</i> +   |             |             |             |             |             |             |
| 0.65705131                  | -0.51961546 | -0.51423461 | -0.18365475 | 0.01081611  | -0.00027326 | 0.00000279  |
| 0.69257349                  | 0.14124019  | 0.62125491  | 0.33676680  | -0.03197067 | 0.00122886  | -0.00001788 |
| 0.28948500                  | 0.74913690  | -0.18687921 | -0.55378924 | 0.11545755  | -0.00745112 | 0.00016066  |
| 0.06883247                  | 0.37783636  | -0.53248581 | 0.64528879  | -0.38802507 | 0.04469217  | -0.00147302 |
| 0.00925383                  | 0.07765526  | -0.17515417 | 0.35613512  | 0.88204011  | -0.24123999 | 0.01346589  |
| 0.00066435                  | 0.00735971  | -0.02145215 | 0.05421134  | 0.23812988  | 0.96194893  | -0.12039411 |
| 0.00002096                  | 0.00028263  | -0.00097306 | 0.00279769  | 0.01632149  | 0.12001260  | 0.99263373  |



TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

| KAPPA = -0.400000 --CONTINUED |             |             |             |             |             |             |             |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J = 13, O+</i>             |             |             |             |             |             |             |             |
| 0.86321813                    | -0.45729706 | 0.21006972  | -0.03998652 | 0.00237632  | -0.00005284 | 0.00000034  |             |
| 0.48081551                    | 0.61799516  | -0.59752094 | 0.17218109  | -0.01485320 | 0.00046145  | -0.00000397 |             |
| 0.15141421                    | 0.61012067  | 0.61579859  | -0.46939591 | 0.07262081  | -0.00350716 | 0.00004310  |             |
| 0.02715384                    | 0.18976082  | 0.45909901  | 0.80940222  | -0.31092942 | 0.02592900  | -0.00047838 |             |
| 0.00270051                    | 0.02649968  | 0.09383579  | 0.30376117  | 0.93084328  | -0.17808764 | 0.00548267  |             |
| 0.00013397                    | 0.00165807  | 0.00737951  | 0.03191651  | 0.17694829  | 0.98141250  | -0.06665524 |             |
| 0.00000221                    | 0.00003239  | 0.00016843  | 0.00087207  | 0.00655377  | 0.06655426  | 0.99776089  |             |
| <i>J = 13, O-</i>             |             |             |             |             |             |             |             |
| 0.48901379                    | -0.66376502 | -0.55980225 | -0.08300603 | 0.00359679  | -0.00006935 | 0.00000041  |             |
| 0.77994221                    | 0.04949131  | 0.59462606  | 0.18823281  | -0.01512615 | 0.00046379  | -0.00000398 |             |
| 0.38044695                    | 0.68071395  | -0.40428154 | -0.47238590 | 0.07269343  | -0.00350753 | 0.00004310  |             |
| 0.08780342                    | 0.30174297  | -0.40191997 | 0.80146160  | -0.31094829 | 0.02592907  | -0.00047838 |             |
| 0.01029565                    | 0.05033798  | -0.08946355 | 0.30195822  | 0.93082346  | -0.17808765 | 0.00548267  |             |
| 0.00057345                    | 0.00351977  | -0.00736901 | 0.03177673  | 0.17694581  | 0.98141249  | -0.06665524 |             |
| 0.00001031                    | 0.00007427  | -0.00017332 | 0.00086904  | 0.00655370  | 0.06655426  | 0.99776089  |             |
| <i>J = 13, E-</i>             |             |             |             |             |             |             |             |
| 0.77021862                    | 0.59477465  | 0.22854912  | -0.02775499 | 0.00116371  | -0.00001743 |             |             |
| 0.60499594                    | -0.56841876 | -0.54571254 | 0.11411614  | -0.00743907 | 0.00016061  |             |             |
| 0.19915605                    | -0.54945516 | 0.71142560  | -0.38769857 | 0.04468951  | -0.00147301 |             |             |
| 0.03275324                    | -0.14488246 | 0.37506693  | 0.88254369  | -0.24123933 | 0.01346589  |             |             |
| 0.00269682                    | -0.01583958 | 0.05615424  | 0.23821647  | 0.96194943  | -0.12039411 |             |             |
| 0.00009394                    | -0.00066864 | 0.00287074  | 0.01632599  | 0.12001264  | 0.99263373  |             |             |
| <i>J = 14, E+</i>             |             |             |             |             |             |             |             |
| 0.64440770                    | -0.50323727 | 0.51497699  | 0.25665140  | 0.02047648  | -0.00066434 | 0.00001002  | -0.00000005 |
| 0.69440469                    | 0.08594279  | -0.56945882 | -0.42813677 | -0.05314830 | 0.00260401  | -0.00005576 | 0.00000036  |
| 0.30939340                    | 0.73788519  | 0.04027435  | 0.57632429  | 0.16077462  | -0.01344630 | 0.00042917  | -0.00000385 |
| 0.08157071                    | 0.42872105  | 0.58717893  | -0.50616735 | -0.45154707 | 0.06822104  | -0.00333654 | 0.00004209  |
| 0.01270877                    | 0.10456330  | 0.24998389  | -0.39496403 | 0.82344151  | -0.30286432 | 0.02517008  | -0.00047073 |
| 0.00112958                    | 0.01248309  | 0.04018572  | -0.08024032 | 0.29670835  | 0.93425768  | -0.17574631 | 0.00542921  |
| 0.00005116                    | 0.00069741  | 0.00272095  | -0.00622688 | 0.03033665  | 0.17479348  | 0.98187427  | -0.06635644 |
| 0.00000078                    | 0.00001249  | 0.00005585  | -0.00014010 | 0.00081120  | 0.00639509  | 0.06626688  | 0.99778110  |
| <i>J = 14, O+</i>             |             |             |             |             |             |             |             |
| 0.85133536                    | -0.46451494 | -0.23692698 | -0.05744001 | 0.00449532  | -0.00013762 | 0.00000160  |             |
| 0.49525421                    | 0.56209097  | 0.62252348  | 0.22496989  | -0.02507872 | 0.00106149  | -0.00001652 |             |
| 0.16955724                    | 0.64230377  | -0.52050454 | -0.52603360 | 0.10493905  | -0.00690400 | 0.00015342  |             |
| 0.03442363                    | 0.23270686  | -0.51703409 | 0.73153746  | -0.37464734 | 0.04276159  | -0.00142833 |             |
| 0.00408194                    | 0.03952461  | -0.13370412 | 0.36261852  | 0.89043171  | -0.23666180 | 0.01321843  |             |
| 0.00026491                    | 0.00328386  | -0.01427422 | 0.05226728  | 0.23422459  | 0.96329604  | -0.11938641 |             |
| 0.00000770                    | 0.00011429  | -0.00058902 | 0.00259493  | 0.01575557  | 0.11905702  | 0.99275883  |             |
| <i>J = 14, O-</i>             |             |             |             |             |             |             |             |
| 0.46192319                    | -0.61951583 | 0.62008282  | -0.13517162 | 0.00729045  | -0.00018854 | 0.00000201  |             |
| 0.77568630                    | -0.05224352 | -0.57393480 | 0.25595511  | -0.02580806 | 0.00106986  | -0.00001657 |             |
| 0.41555597                    | 0.68540918  | 0.25874018  | -0.52865304 | 0.10516304  | -0.00690552 | 0.00015343  |             |
| 0.10959552                    | 0.37111009  | 0.44871609  | 0.71182027  | -0.37470158 | 0.04276192  | -0.00142833 |             |
| 0.01544343                    | 0.07687632  | 0.13256179  | 0.35690006  | 0.89034694  | -0.23666189 | 0.01321843  |             |
| 0.00113248                    | 0.00722921  | 0.01518122  | 0.05166609  | 0.23421007  | 0.96329597  | -0.11938641 |             |
| 0.00003603                    | 0.00027415  | 0.00065538  | 0.00257153  | 0.01575482  | 0.11905701  | 0.99275883  |             |
| <i>J = 14, E-</i>             |             |             |             |             |             |             |             |
| 0.74217680                    | 0.60847570  | 0.27749171  | -0.04385663 | 0.00242045  | -0.00005388 | 0.00000035  |             |
| 0.62743502                    | -0.48595799 | -0.58753477 | 0.15745824  | -0.01340660 | 0.00042891  | -0.00000385 |             |
| 0.23130233                    | -0.59686111 | 0.61827953  | -0.45091312 | 0.06821074  | -0.00333650 | 0.00004209  |             |
| 0.04446599                    | -0.19142217 | 0.43386664  | 0.82509461  | -0.30286168 | 0.02517007  | -0.00047073 |             |
| 0.00456506                    | -0.02671673 | 0.08514331  | 0.29708085  | 0.93426052  | -0.17574631 | 0.00542921  |             |
| 0.00022961                    | -0.00165536 | 0.00648094  | 0.00306540  | 0.17479384  | 0.98187427  | -0.06635644 |             |
| 0.00000381                    | -0.00003194 | 0.00014397  | 0.00081182  | 0.00639510  | 0.06626688  | 0.99778110  |             |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

|                                      |             |              |             |             |             |             |              |
|--------------------------------------|-------------|--------------|-------------|-------------|-------------|-------------|--------------|
| <i>KAPPA</i> = -0.400000 --CONTINUED |             |              |             |             |             |             |              |
| <i>J</i> = 15, <i>E</i> +            |             |              |             |             |             |             |              |
| 0.63290848                           | -0.48929044 | 0.50209061   | 0.32647683  | 0.03657118  | -0.00147220 | 0.00002988  | --0.00000026 |
| 0.69507268                           | 0.03947406  | -0.50324826  | -0.50488306 | -0.08440486 | 0.00508450  | -0.00014603 | 0.00000170   |
| 0.32728274                           | 0.71906663  | -0.09537801  | 0.56569309  | 0.21497533  | -0.02254366 | 0.00097206  | --0.00001569 |
| 0.09436830                           | 0.47299054  | 0.61066219   | -0.35585081 | -0.50813408 | 0.09794904  | -0.00649436 | 0.00014769   |
| 0.01668267                           | 0.13372910  | 0.32888486   | -0.42320139 | 0.74844999  | -0.36427185 | 0.04123411  | --0.00139189 |
| 0.00176846                           | 0.01934636  | 0.06661998   | -0.11235245 | 0.35286362  | 0.89645569  | -0.23290861 | 0.01301251   |
| 0.00010470                           | 0.00143048  | 0.00611622   | -0.01203203 | 0.04927389  | 0.23088779  | 0.96437985  | --0.11853346 |
| 0.00000282                           | 0.00004551  | 0.00022677   | -0.00049441 | 0.00238632  | 0.01529005  | 0.11824419  | 0.99286380   |
| <i>J</i> = 15, <i>O</i> +            |             |              |             |             |             |             |              |
| 0.84014695                           | -0.46947491 | -0.26004178  | -0.07786023 | 0.00789690  | -0.00031669 | 0.00000548  | --0.00000003 |
| 0.50739984                           | 0.50924006  | 0.63466296   | 0.28077354  | -0.03980384 | 0.00218284  | -0.00005015 | 0.00000034   |
| 0.18677034                           | 0.66450498  | -0.42111356  | -0.57029408 | 0.14431435  | -0.01229681 | 0.00040342  | -0.00000374  |
| 0.04220670                           | 0.27499528  | -0.56497538  | 0.63976026  | -0.43576864 | 0.06481713  | -0.00320150 | 0.00004125   |
| 0.00580661                           | 0.05518518  | -0.18009750  | 0.41757106  | 0.83766589  | -0.29636632 | 0.02455240  | -0.00046433  |
| 0.00046639                           | 0.00575427  | -0.02469860  | 0.07858952  | 0.29171615  | 0.93693584  | -0.17379377 | 0.00538389   |
| 0.00001943                           | 0.00029040  | -0.00150102  | 0.00579330  | 0.02914302  | 0.17297882  | 0.98225448  | -0.06610023  |
| 0.00000028                           | 0.00000480  | -0.00002843  | 0.00012536  | 0.00076496  | 0.00626303  | 0.06601982  | 0.99779835   |
| <i>J</i> = 15, <i>O</i> -            |             |              |             |             |             |             |              |
| 0.43818293                           | -0.58010859 | 0.65444267   | -0.20732333 | 0.01383361  | -0.00045464 | 0.00000708  | -0.00000004  |
| 0.76861562                           | -0.13478352 | -0.52778443  | 0.33282448  | -0.04159334 | 0.00220891  | -0.00005036 | 0.00000035   |
| 0.44642258                           | 0.66813379  | 0.11082174   | -0.56645055 | 0.14493076  | -0.01230230 | 0.00040345  | -0.00000374  |
| 0.13211926                           | 0.43254609  | 0.49364352   | 0.59795821  | -0.43588845 | 0.06481853  | -0.00320151 | 0.00004125   |
| 0.02175260                           | 0.10789842  | 0.19065275   | 0.40240870  | 0.83735732  | -0.29636668 | 0.02455241  | -0.00046433  |
| 0.00198589                           | 0.01288289  | 0.02882791   | 0.07654834  | 0.29164720  | 0.93693545  | -0.17379377 | 0.00538389   |
| 0.00009106                           | 0.00071420  | 0.00186425   | 0.00567726  | 0.02913774  | 0.17297877  | 0.98225448  | -0.06610023  |
| 0.00000140                           | 0.00001266  | 0.00003688   | 0.00012335  | 0.00076485  | 0.00626303  | 0.06601982  | 0.99779835   |
| <i>J</i> = 15, <i>E</i> -            |             |              |             |             |             |             |              |
| 0.71591508                           | -0.61518989 | -0.32359720  | -0.06534914 | 0.00461690  | -0.00013959 | 0.00000166  |              |
| 0.64453539                           | 0.40484231  | 0.61404912   | 0.20764542  | -0.02242655 | 0.00097103  | -0.00001568 |              |
| 0.26205240                           | 0.63095298  | -0.51587805  | -0.50741241 | 0.09791407  | -0.00649417 | 0.00014769  |              |
| 0.05759916                           | 0.24048267  | -0.48706081  | 0.75314817  | -0.36426343 | 0.04123407  | -0.00139189 |              |
| 0.00709840                           | 0.04121753  | -0.12129502  | 0.35421151  | 0.89646903  | -0.23290860 | 0.01301251  |              |
| 0.00046921                           | 0.00340992  | -0.01254609  | 0.04941492  | 0.23089007  | 0.96437986  | -0.11853346 |              |
| 0.00001374                           | 0.00011759  | -0.000050395 | 0.00239181  | 0.01529017  | 0.11824419  | 0.99286380  |              |
| <i>KAPPA</i> = -0.500000             |             |              |             |             |             |             |              |
| <i>J</i> = 2, <i>E</i> +             |             |              |             |             |             |             |              |
| 0.99265436                           | -0.12098483 |              |             |             |             |             |              |
| 0.12098483                           | 0.99265436  |              |             |             |             |             |              |
| <i>J</i> = 3, <i>E</i> +             |             |              |             |             |             |             |              |
| 0.96824584                           | -0.25000000 |              |             |             |             |             |              |
| 0.25000000                           | 0.96824584  |              |             |             |             |             |              |
| <i>J</i> = 3, <i>O</i> +             |             |              |             |             |             |             |              |
| 0.99806959                           | -0.06210548 |              |             |             |             |             |              |
| 0.06210548                           | 0.99806959  |              |             |             |             |             |              |
| <i>J</i> = 3, <i>O</i> -             |             |              |             |             |             |             |              |
| 0.99704859                           | -0.07677314 |              |             |             |             |             |              |
| 0.07677314                           | 0.99704859  |              |             |             |             |             |              |
| <i>J</i> = 4, <i>E</i> +             |             |              |             |             |             |             |              |
| 0.92696856                           | -0.37506157 | 0.00762242   |             |             |             |             |              |
| 0.37475870                           | 0.92492291  | -0.06382412  |             |             |             |             |              |
| 0.01688782                           | 0.06201952  | 0.99793205   |             |             |             |             |              |
| <i>J</i> = 4, <i>O</i> +             |             |              |             |             |             |             |              |
| 0.99304376                           | -0.11774586 |              |             |             |             |             |              |
| 0.11774586                           | 0.99304376  |              |             |             |             |             |              |
| <i>J</i> = 4, <i>O</i> -             |             |              |             |             |             |             |              |
| 0.98622872                           | -0.16538716 |              |             |             |             |             |              |
| 0.16538716                           | 0.98622872  |              |             |             |             |             |              |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.500000 —CONTINUED |             |             |             |  |
|------------------------------|-------------|-------------|-------------|--|
| <i>J</i> = 4, <i>E</i> —     |             |             |             |  |
| 0.99803726                   | -0.06262291 |             |             |  |
| 0.06262291                   | 0.99803726  |             |             |  |
| <i>J</i> = 5, <i>E</i> +     |             |             |             |  |
| 0.88015834                   | -0.47413056 | 0.02283658  |             |  |
| 0.47299531                   | 0.87196874  | -0.12627733 |             |  |
| 0.03995916                   | 0.12194564  | 0.99173208  |             |  |
| <i>J</i> = 5, <i>O</i> +     |             |             |             |  |
| 0.98460403                   | -0.17474805 | 0.00424461  |             |  |
| 0.17468516                   | 0.98279082  | -0.06006078 |             |  |
| 0.00632394                   | 0.05987755  | 0.99818570  |             |  |
| <i>J</i> = 5, <i>O</i> —     |             |             |             |  |
| 0.96001546                   | -0.27990084 | 0.00508276  |             |  |
| 0.27969107                   | 0.95820358  | -0.06015650 |             |  |
| 0.01196754                   | 0.05917278  | 0.99817602  |             |  |
| <i>J</i> = 5, <i>E</i> —     |             |             |             |  |
| 0.99265436                   | -0.12098483 |             |             |  |
| 0.12098483                   | 0.99265436  |             |             |  |
| <i>J</i> = 6, <i>E</i> +     |             |             |             |  |
| 0.83719374                   | -0.54453819 | 0.05083849  | -0.00049676 |  |
| 0.54262081                   | 0.81542377  | -0.20156390 | 0.00432739  |  |
| 0.06830157                   | 0.19622392  | 0.97644207  | -0.05824053 |  |
| 0.00204917                   | 0.00764206  | 0.05786477  | 0.99829308  |  |
| <i>J</i> = 6, <i>O</i> +     |             |             |             |  |
| 0.97328863                   | -0.22930221 | 0.01139043  |             |  |
| 0.22908056                   | 0.96666759  | -0.11434975 |             |  |
| 0.01520989                   | 0.11390464  | 0.99337525  |             |  |
| <i>J</i> = 6, <i>O</i> —     |             |             |             |  |
| 0.91234522                   | -0.40915854 | 0.01467959  |             |  |
| 0.40803175                   | 0.90571105  | -0.11488077 |             |  |
| 0.03370898                   | 0.11080066  | 0.99327082  |             |  |
| <i>J</i> = 6, <i>E</i> —     |             |             |             |  |
| 0.98253527                   | -0.18602763 | 0.00426271  |             |  |
| 0.18595752                   | 0.98083062  | -0.05823304 |             |  |
| 0.00665196                   | 0.05800869  | 0.99829392  |             |  |
| <i>J</i> = 7, <i>E</i> +     |             |             |             |  |
| 0.80090191                   | -0.59105564 | 0.09594880  | -0.00178730 |  |
| 0.59052406                   | 0.75310220  | -0.28979726 | 0.01166028  |  |
| 0.09903706                   | 0.28812561  | 0.94617174  | -0.10924442 |  |
| 0.00539770                   | 0.02177016  | 0.10756591  | 0.99394492  |  |
| <i>J</i> = 7, <i>O</i> +     |             |             |             |  |
| 0.96007030                   | -0.27882194 | 0.02287488  | -0.00029000 |  |
| 0.27842719                   | 0.94433260  | -0.17520756 | 0.00406907  |  |
| 0.02725486                   | 0.17452189  | 0.98262496  | -0.05698663 |  |
| 0.00069979                   | 0.00603186  | 0.05680884  | 0.99836661  |  |
| <i>J</i> = 7, <i>O</i> —     |             |             |             |  |
| 0.84659891                   | -0.53125789 | 0.03217496  | -0.00034305 |  |
| 0.52794534                   | 0.83058920  | -0.17714033 | 0.00407402  |  |
| 0.06738010                   | 0.16688673  | 0.98201894  | -0.05698721 |  |
| 0.00198261                   | 0.00595405  | 0.05678799  | 0.99836654  |  |
| <i>J</i> = 7, <i>E</i> —     |             |             |             |  |
| 0.96696068                   | -0.25467289 | 0.01134717  |             |  |
| 0.25436442                   | 0.96092421  | -0.10919436 |             |  |
| 0.01690507                   | 0.10847297  | 0.99395565  |             |  |

TABLE I. -- TRANSFORMATION COEFFICIENTS -- CONTINUED

KAPPA = -0.500000 -- CONTINUED

J = 8, E+

|            |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|
| 0.77076649 | -0.61668838 | 0.15997572  | -0.00471579 | 0.00003327  |
| 0.62359411 | 0.67883040  | -0.38696813 | 0.02398424  | -0.00029732 |
| 0.13015815 | 0.39581083  | 0.89381456  | -0.16574918 | 0.00392157  |
| 0.01040248 | 0.04708278  | 0.16040577  | 0.98427565  | -0.05609301 |
| 0.00023322 | 0.00131324  | 0.00538062  | 0.05595681  | 0.99841780  |

J = 8, O+

|            |             |             |             |
|------------|-------------|-------------|-------------|
| 0.94591189 | -0.32204064 | 0.03923772  | -0.00096175 |
| 0.32170837 | 0.91549557  | -0.24137033 | 0.01058062  |
| 0.04184102 | 0.24065977  | 0.96393796  | -0.10562105 |
| 0.00193609 | 0.01551014  | 0.10499699  | 0.99434970  |

J = 8, O--

|            |             |             |             |
|------------|-------------|-------------|-------------|
| 0.77517835 | -0.62877871 | 0.06110998  | -0.00119434 |
| 0.62210796 | 0.74295186  | -0.24676238 | 0.01060911  |
| 0.10974873 | 0.22894396  | 0.96144845  | -0.10562557 |
| 0.00595172 | 0.01563768  | 0.10483693  | 0.99434866  |

J = 8, E--

|            |             |             |             |
|------------|-------------|-------------|-------------|
| 0.94611929 | -0.32300647 | 0.02291332  | -0.00029333 |
| 0.32222069 | 0.93207163  | -0.16553225 | 0.00392119  |
| 0.03211613 | 0.16394979  | 0.98434882  | -0.05609297 |
| 0.00081681 | 0.00545548  | 0.05595939  | 0.99841781  |

J = 9, E+

|            |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|
| 0.74551091 | 0.62236582  | 0.23825163  | -0.01050776 | 0.00013683  |
| 0.64667633 | -0.58919589 | -0.48250237 | 0.04299330  | -0.00097868 |
| 0.16041741 | -0.50802529 | 0.81507716  | -0.22743330 | 0.00999413  |
| 0.01699986 | -0.08601910 | 0.21423030  | 0.96736598  | -0.10305414 |
| 0.00068323 | -0.00447319 | 0.01349907  | 0.10255884  | 0.99462505  |

J = 9, O+

|            |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|
| 0.93154004 | -0.35857371 | 0.06043614  | -0.00234908 | 0.00001993  |
| 0.35892553 | 0.88000844  | -0.31034786 | 0.02101765  | -0.00028087 |
| 0.05822501 | 0.30999332  | 0.93559667  | -0.15861374 | 0.00381348  |
| 0.00393222 | 0.03022615  | 0.15705092  | 0.98556296  | -0.05542183 |
| 0.00007825 | 0.00074850  | 0.00505561  | 0.05531795  | 0.99845571  |

J = 9, O--

|            |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|
| 0.70884161 | 0.69741501  | 0.10557635  | -0.00308332 | 0.00002344  |
| 0.68771277 | -0.65006200 | -0.32252739 | 0.02113184  | -0.00028117 |
| 0.15631841 | -0.29999872 | 0.92756954  | -0.15863645 | 0.00381350  |
| 0.01261750 | -0.03212109 | 0.15626607  | 0.98555485  | -0.05542183 |
| 0.00028034 | -0.00083658 | 0.00503788  | 0.05531765  | 0.99845571  |

J = 9, E--

|            |             |             |             |
|------------|-------------|-------------|-------------|
| 0.92104461 | -0.38739735 | 0.03999013  | -0.00095804 |
| 0.38594852 | 0.89417178  | -0.22671730 | 0.00999163  |
| 0.05210347 | 0.22402709  | 0.96771743  | -0.10305375 |
| 0.00240855 | 0.01385593  | 0.10258186  | 0.99462514  |

J = 10, E+

|            |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|
| 0.72398643 | 0.61128193  | 0.31896772  | -0.02091595 | 0.00040917  | -0.00000226 |
| 0.66291651 | -0.48936754 | -0.56219613 | 0.07064606  | -0.00239940 | 0.00002057  |
| 0.18909727 | -0.60661516 | 0.71407972  | -0.29320475 | 0.01952736  | -0.00027071 |
| 0.02500854 | -0.13695344 | 0.26759816  | 0.94095621  | -0.15361323 | 0.00373220  |
| 0.00146187 | -0.01074991 | 0.02600153  | 0.15225391  | 0.98641322  | -0.05489935 |
| 0.00002615 | -0.00023214 | 0.00063529  | 0.00477316  | 0.05481515  | 0.99848488  |

J = 10, O+

|            |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|
| 0.91741588 | -0.38854711 | 0.08576538  | -0.00485166 | 0.00007684  |
| 0.39060270 | 0.83818062  | -0.37889552 | 0.03633394  | -0.00089513 |
| 0.07570875 | 0.37934637  | 0.89651889  | -0.21570099 | 0.00956469  |
| 0.00676427 | 0.05074889  | 0.21254794  | 0.97055432  | -0.10112608 |
| 0.00024030 | 0.00229572  | 0.01263885  | 0.10076560  | 0.99482723  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.500000 --CONTINUED |             |             |             |             |             |             |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 10, <i>O</i> -     |             |             |             |             |             |             |
| 0.65168783                    | 0.73933308  | 0.16924416  | -0.00678071 | 0.00009369  |             |             |
| 0.73029589                    | -0.55147938 | -0.40148516 | 0.03670528  | -0.00089691 |             |             |
| 0.20366783                    | -0.38185953 | 0.87524113  | -0.21578738 | 0.00956490  |             |             |
| 0.02212514                    | -0.05858551 | 0.20967185  | 0.97050989  | -0.10112611 |             |             |
| 0.00088791                    | -0.00285072 | 0.01252052  | 0.10076266  | 0.99482723  |             |             |
| <i>J</i> = 10, <i>E</i> -     |             |             |             |             |             |             |
| 0.89321593                    | -0.44514108 | 0.06331921  | -0.00232365 | 0.00002031  |             |             |
| 0.44310768                    | 0.84759907  | -0.29129104 | 0.01951584  | -0.00027069 |             |             |
| 0.07611827                    | 0.28757545  | 0.94228239  | -0.15361097 | 0.00373220  |             |             |
| 0.00518533                    | 0.02692932  | 0.15238533  | 0.98641406  | -0.05489935 |             |             |
| 0.00010254                    | 0.00064456  | 0.00477617  | 0.05481518  | 0.99848488  |             |             |
| <i>J</i> = 11, <i>E</i> +     |             |             |             |             |             |             |
| 0.70532776                    | -0.59060762 | -0.39016440 | -0.03828928 | 0.00102553  | -0.00001034 |             |
| 0.67435380                    | 0.39064946  | 0.61701121  | 0.10914120  | -0.00502939 | 0.00007843  |             |
| 0.21583282                    | 0.67842866  | -0.60124325 | -0.36131156 | 0.03332472  | -0.00084482 |             |
| 0.03418941                    | 0.19461310  | -0.32188169 | 0.90230188  | -0.20764116 | 0.00924478  |             |
| 0.00263887                    | 0.02086262  | -0.04431246 | 0.20442330  | 0.97256361  | -0.09962600 |             |
| 0.00008399                    | 0.00081982  | -0.00200940 | 0.01176915  | 0.09933930  | 0.99498165  |             |
| <i>J</i> = 11, <i>O</i> +     |             |             |             |             |             |             |
| 0.90379389                    | -0.41241917 | 0.11396055  | -0.00894281 | 0.00021611  | -0.00000138 |             |
| 0.41745122                    | 0.79101422  | -0.44354624 | 0.05738624  | -0.00212855 | 0.00001953  |             |
| 0.09371073                    | 0.44525310  | 0.84647343  | -0.27588242 | 0.01842625  | -0.00026290 |             |
| 0.01044471                    | 0.07700567  | 0.27050678  | 0.94779677  | -0.14984970 | 0.00366874  |             |
| 0.00053815                    | 0.00516933  | 0.02425317  | 0.14891655  | 0.98703619  | -0.05448107 |             |
| 0.00000874                    | 0.00010031  | 0.00056111  | 0.00456907  | 0.05441061  | 0.99850803  |             |
| <i>J</i> = 11, <i>O</i> -     |             |             |             |             |             |             |
| 0.60357923                    | 0.75608107  | 0.25269235  | -0.01341789 | 0.00027431  | -0.00000161 |             |
| 0.75641610                    | -0.44324036 | -0.47744552 | 0.05842849  | -0.00213600 | 0.00001955  |             |
| 0.24968522                    | -0.47136629 | 0.79929582  | -0.27614792 | 0.01842737  | -0.00026290 |             |
| 0.03435130                    | -0.09818551 | 0.26221002  | 0.94760595  | -0.14984992 | 0.00366874  |             |
| 0.00202088                    | -0.00726727 | 0.02375193  | 0.14889755  | 0.98703611  | -0.05448107 |             |
| 0.00003596                    | -0.00014997 | 0.00055275  | 0.00456863  | 0.05441061  | 0.99850803  |             |
| <i>J</i> = 11, <i>E</i> -     |             |             |             |             |             |             |
| 0.86409923                    | -0.49460481 | 0.09314260  | -0.00480040 | 0.00007699  |             |             |
| 0.49255638                    | 0.79295345  | -0.35707788 | 0.03328211  | -0.00084467 |             |             |
| 0.10311385                    | 0.35286257  | 0.90645423  | -0.20763143 | 0.00924477  |             |             |
| 0.00938882                    | 0.04555135  | 0.20499147  | 0.97256881  | -0.09962600 |             |             |
| 0.00033330                    | 0.00199384  | 0.01179292  | 0.09933965  | 0.99498165  |             |             |
| <i>J</i> = 12, <i>E</i> +     |             |             |             |             |             |             |
| 0.68891107                    | -0.56751537 | -0.44613437 | -0.06547337 | 0.00228166  | -0.00003418 | 0.00000016  |
| 0.68234025                    | 0.30183672  | 0.64607293  | 0.16064103  | -0.00951620 | 0.00021977  | -0.00000143 |
| 0.24048656                    | 0.72200493  | -0.48386586 | -0.42897983 | 0.05216644  | -0.00197260 | 0.00001886  |
| 0.04428707                    | 0.25358517  | -0.37999742 | 0.84801599  | -0.26437424 | 0.01761392  | -0.00025680 |
| 0.00426120                    | 0.03493178  | -0.07075283 | 0.25740557  | 0.95178727  | -0.14692152 | 0.00361782  |
| 0.00019626                    | 0.00202750  | -0.00486925 | 0.02224863  | 0.14618729  | 0.98750971  | -0.05413863 |
| 0.00000292                    | 0.00003547  | -0.00009525 | 0.00050010  | 0.00440859  | 0.05407818  | 0.99852684  |
| <i>J</i> = 12, <i>O</i> +     |             |             |             |             |             |             |
| 0.89079324                    | -0.43089889 | 0.14347301  | -0.01512562 | 0.00051043  | -0.00000597 |             |
| 0.44019105                    | 0.74013259  | -0.50122220 | 0.08481238  | -0.00433033 | 0.00007231  |             |
| 0.11178141                    | 0.50468865  | 0.73602095  | -0.33763959 | 0.03105168  | -0.00080651 |             |
| 0.01493732                    | 0.10827370  | 0.32970375  | 0.91577759  | -0.20154302 | 0.00899650  |             |
| 0.00101446                    | 0.00979598  | 0.04068602  | 0.19950971  | 0.97404105  | -0.09842543 |             |
| 0.00002925                    | 0.00034272  | 0.00171781  | 0.01117422  | 0.09818974  | 0.99510343  |             |
| <i>J</i> = 12, <i>O</i> -     |             |             |             |             |             |             |
| 0.56302429                    | 0.74845783  | 0.34958465  | -0.02458946 | 0.00067732  | -0.00000720 |             |
| 0.77113903                    | -0.32471136 | -0.54059783 | 0.08741933  | -0.00435580 | 0.00007243  |             |
| 0.29314233                    | -0.55778204 | 0.69822862  | -0.33831703 | 0.03105631  | -0.00080653 |             |
| 0.04900080                    | -0.15169534 | 0.31061790  | 0.91509727  | -0.20154406 | 0.00899650  |             |
| 0.00383710                    | -0.01551721 | 0.03917991  | 0.19941668  | 0.97404048  | -0.09842543 |             |
| 0.00012206                    | -0.00058639 | 0.00167484  | 0.01117033  | 0.09818970  | 0.99510343  |             |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

KAPPA = -0.500000—CONTINUED

J = 12, E—

|            |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|
| 0.83486083 | -0.53505675 | 0.12900479  | -0.00891036 | 0.00021416  | -0.00000141 |
| 0.53418647 | 0.73106112  | -0.42128768 | 0.05203138  | -0.00197189 | 0.00001886  |
| 0.13199265 | 0.41749817  | 0.85911990  | -0.26434051 | 0.01761382  | -0.00025680 |
| 0.01515076 | 0.07027243  | 0.25939676  | 0.95181224  | -0.14692150 | 0.00361782  |
| 0.00078476 | 0.00457948  | 0.02237250  | 0.14618978  | 0.98750972  | -0.05413863 |
| 0.00001269 | 0.00008649  | 0.00050225  | 0.00440865  | 0.05407818  | 0.99852684  |

J = 13, E+

|            |             |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.67428620 | -0.54596994 | -0.48597046 | -0.10519531 | 0.00464753  | -0.00009427 | 0.00000077  |
| 0.68779729 | 0.22579753  | 0.65149360  | 0.22633261  | -0.01672520 | 0.00052086  | -0.00000612 |
| 0.26306141 | 0.74284391  | -0.36239436 | -0.49167231 | 0.07677679  | -0.00395067 | 0.00006840  |
| 0.05505633 | 0.31035795  | -0.44297141 | 0.77423850  | -0.32266580 | 0.02939365  | -0.00077693 |
| 0.00635304 | 0.05269079  | -0.10829875 | 0.30850473  | 0.92275312  | -0.19679636 | 0.00879828  |
| 0.00038511 | 0.00410182  | -0.01032967 | 0.03664914  | 0.19519996  | 0.97515898  | -0.09744278 |
| 0.00001015 | 0.00012884  | -0.00037049 | 0.00150071  | 0.01069747  | 0.09724336  | 0.99520193  |

J = 13, O+

|            |             |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.87845317 | -0.44485115 | 0.17279207  | -0.02385853 | 0.00107085  | -0.00001874 | 0.00000010  |
| 0.45947374 | 0.68742929  | -0.54966699 | 0.11886056  | -0.00794912 | 0.00019713  | -0.00000136 |
| 0.12959190 | 0.55562998  | 0.71625185  | -0.39893820 | 0.04805644  | -0.00185432 | 0.00001832  |
| 0.02017252 | 0.14335535  | 0.38865863  | 0.87314502  | -0.25556985 | 0.01698651  | -0.00025190 |
| 0.00170645 | 0.01650115  | 0.06262076  | 0.25164872  | 0.95475702  | -0.14457732 | 0.00357605  |
| 0.00007106 | 0.00084658  | 0.00393515  | 0.02101732  | 0.14398263  | 0.98788203  | -0.05385311 |
| 0.00000098 | 0.00001351  | 0.00007210  | 0.00046003  | 0.00428062  | 0.05380026  | 0.99854243  |

J = 13, O—

|             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.52847062  | 0.72074482  | -0.44658829 | -0.04245446 | 0.00149212  | -0.00002333 | 0.00000011  |
| 0.77796637  | -0.20282923 | 0.58137502  | 0.12476891  | -0.00802474 | 0.00019766  | -0.00000137 |
| 0.33336419  | -0.62624773 | -0.57798700 | -0.40037321 | 0.04807276  | -0.00185438 | 0.00001832  |
| 0.06567789  | -0.21534772 | -0.35348927 | 0.87106286  | -0.25557386 | 0.01698652  | -0.00025190 |
| 0.000646364 | -0.02870099 | -0.05936138 | 0.25127705  | 0.95475398  | -0.14457733 | 0.00357605  |
| 0.00029899  | -0.00161398 | -0.00381734 | 0.02099422  | 0.14398233  | 0.98788203  | -0.05385311 |
| 0.00000443  | -0.00002745 | -0.00007101 | 0.00045962  | 0.00428061  | 0.05380026  | 0.99854243  |

J = 13, E—

|            |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|
| 0.80629151 | -0.56645374 | 0.16967793  | -0.01527456 | 0.00050275  | -0.00000602 |
| 0.56852226 | 0.66315573  | -0.48078564 | 0.07639699  | -0.00394798 | 0.00006839  |
| 0.16176520 | 0.47859164  | 0.79991685  | -0.32256865 | 0.02939317  | -0.00077693 |
| 0.02249606 | 0.10111822  | 0.31433417  | 0.92285258  | -0.19679626 | 0.00879828  |
| 0.00154556 | 0.00892740  | 0.03713942  | 0.19521352  | 0.97515904  | -0.09744278 |
| 0.00004454 | 0.00030478  | 0.00151602  | 0.01069804  | 0.09724337  | 0.99520193  |

J = 14, E+

|            |             |             |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.66112257 | -0.52718608 | -0.50972778 | -0.15840225 | 0.00883437  | -0.00022977 | 0.00000278  | -0.00000001 |
| 0.69136942 | 0.16172861  | 0.63437536  | 0.30437954  | -0.02778433 | 0.00110416  | -0.00001909 | 0.00000010  |
| 0.28364179 | 0.74740306  | -0.23469109 | -0.54239231 | 0.10777481  | -0.00715758 | 0.00018309  | -0.00000132 |
| 0.06627684 | 0.36307849  | -0.50686738 | 0.67799136  | -0.38099505 | 0.04510228  | -0.00176396 | 0.00001789  |
| 0.00891806 | 0.07367831  | -0.15922367 | 0.35404969  | 0.88411503  | -0.24871132 | 0.01648779  | -0.00024787 |
| 0.00067280 | 0.00726387  | -0.01994295 | 0.05511467  | 0.24559837  | 0.95698953  | -0.14265821 | 0.00354117  |
| 0.00002556 | 0.00033330  | -0.00106907 | 0.00336310  | 0.01998035  | 0.14216031  | 0.98818241  | -0.05361141 |
| 0.00000033 | 0.00000488  | -0.00001749 | 0.00006010  | 0.00042819  | 0.00417612  | 0.05356451  | 0.99855556  |

J = 14, O+

|            |             |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.86676907 | -0.45517187 | 0.20067059  | -0.03545460 | 0.00205566  | -0.00004920 | 0.00000046  |
| 0.47585890 | 0.63466199  | -0.58756581 | 0.15920269  | -0.01353424 | 0.00045505  | -0.00000568 |
| 0.14691322 | 0.59721401  | 0.63855435  | -0.45726271 | 0.06998339  | -0.00366221 | 0.00006533  |
| 0.02606107 | 0.18084966  | 0.44552525  | 0.81891869  | -0.31097020 | 0.02811779  | -0.00075335 |
| 0.00264367 | 0.02546582  | 0.09051901  | 0.30410616  | 0.92808917  | -0.19299266 | 0.00863636  |
| 0.00014469 | 0.00174251  | 0.00771838  | 0.03461239  | 0.19171978  | 0.97603624  | -0.09662364 |
| 0.00000351 | 0.00004971  | 0.00025572  | 0.00137220  | 0.01031910  | 0.09645129  | 0.99528323  |

J = 14, O—

|            |             |             |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.49865373 | 0.68186924  | -0.53058468 | -0.06978217 | 0.00302230  | -0.00006337 | 0.00000055  |
| 0.77927525 | -0.08843789 | 0.59610110  | 0.17141590  | -0.01373628 | 0.00045692  | -0.00000569 |
| 0.37003773 | -0.66730040 | -0.44894004 | -0.45969216 | 0.07003428  | -0.00366248 | 0.00006533  |
| 0.08394340 | -0.28234282 | -0.39269975 | 0.81333960  | -0.31098304 | 0.02811784  | -0.00075335 |
| 0.00998794 | -0.04704243 | -0.08558939 | 0.30284696  | 0.92807579  | -0.19299267 | 0.00863636  |
| 0.00061117 | -0.00357543 | -0.00758337 | 0.03450641  | 0.19171796  | 0.97603624  | -0.09662364 |
| 0.00001610 | -0.00010970 | -0.00025760 | 0.00136887  | 0.01031903  | 0.09645129  | 0.99528323  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.500000 —CONTINUED |              |              |              |              |              |              |              |
|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <i>J</i> = 14, <i>E</i> —    |              |              |              |              |              |              |              |
| 0.77885814                   | --0.58930439 | 0.21329627   | --0.02457488 | 0.00105307   | --0.00001867 | 0.00000010   |              |
| 0.59638144                   | 0.59099574   | --0.53253534 | 0.10680908   | --0.00714871 | 0.00018305   | --0.00000132 |              |
| 0.19162036                   | 0.53320268   | 0.72935599   | --0.38076137 | 0.04510042   | --0.00176396 | 0.00001789   |              |
| 0.03136085                   | 0.13746642   | 0.36841485   | 0.88445519   | --0.24871086 | 0.01648779   | --0.00024787 |              |
| 0.00270090                   | 0.01554467   | 0.05665129   | 0.24565861   | 0.95698989   | --0.14265821 | 0.00354117   |              |
| 0.00011287                   | 0.00078100   | 0.00343273   | 0.01998407   | 0.14216034   | 0.98818241   | --0.05361141 |              |
| 0.00000154                   | 0.00001221   | 0.00006106   | 0.00042826   | 0.00417612   | 0.05356451   | 0.99855556   |              |
| <i>J</i> = 15, <i>E</i> +    |              |              |              |              |              |              |              |
| 0.64917189                   | --0.51109884 | --0.51758221 | 0.22183387   | 0.01587321   | --0.00051076 | 0.00000832   | --0.00000006 |
| 0.69351774                   | 0.10769054   | 0.59599205   | --0.38765598 | --0.04413109 | 0.00215703   | --0.00005002 | 0.00000047   |
| 0.30235517                   | 0.74079706   | --0.10236118 | 0.57269080   | 0.14561212   | --0.01205959 | 0.00041581   | --0.00000539 |
| 0.07775947                   | 0.41084140   | --0.56179252 | --0.56031043 | --0.43742564 | 0.06520064   | --0.00344424 | 0.00006288   |
| 0.01194317                   | 0.09732722   | --0.22262805 | --0.39055673 | 0.83452889   | --0.30184955 | 0.02710758   | --0.00073412 |
| 0.00108019                   | 0.01169092   | --0.03526490 | --0.07754837 | 0.29622204   | 0.93205791   | --0.18987645 | 0.00850162   |
| 0.00005388                   | 0.00071296   | --0.00257184 | --0.00645689 | 0.03269326   | 0.18882061   | 0.97674279   | --0.09593031 |
| 0.00000121                   | 0.00001862   | --0.00007623 | --0.00020930 | 0.00126475   | 0.01001039   | 0.09577885   | 0.99535147   |
| <i>J</i> = 15, <i>O</i> +    |              |              |              |              |              |              |              |
| 0.85571400                   | --0.46267785 | --0.22621160 | --0.04997537 | 0.00367629   | --0.00011426 | 0.00000157   | --0.00000001 |
| 0.48981523                   | 0.58319330   | 0.61445328   | 0.20479498   | --0.02172367 | 0.00094002   | --0.00001729 | 0.00000010   |
| 0.16359448                   | 0.62954125   | --0.55457149 | --0.50977007 | 0.09724535   | --0.00655085 | 0.00017214   | --0.00000128 |
| 0.03250478                   | 0.21939512   | --0.49805031 | 0.75273259   | --0.36648486 | 0.04283393   | --0.00169250 | 0.00001754   |
| 0.00384694                   | 0.03671961   | --0.12444052 | 0.35543654   | 0.89297781   | --0.24320409 | 0.01608189   | --0.00024450 |
| 0.00026182                   | 0.00316796   | --0.01363632 | 0.05239300   | 0.24076948   | 0.95873837   | --0.14105810 | 0.00351160   |
| 0.00000915                   | 0.00013154   | --0.00066594 | 0.00307245   | 0.01916453   | 0.14063155   | 0.98842986   | --0.05340415 |
| 0.00000011                   | 0.00000178   | --0.00001016 | 0.00005320   | 0.00040344   | 0.00408924   | 0.05336204   | 0.99856678   |
| <i>J</i> = 15, <i>O</i> —    |              |              |              |              |              |              |              |
| 0.47261290                   | --0.64070529 | 0.59502240   | --0.10976898 | 0.00573389   | --0.00015274 | 0.00000193   | --0.00000001 |
| 0.77669849                   | --0.01117805 | --0.58671457 | 0.22778474   | --0.02221999 | 0.00094588   | --0.00001733 | 0.00000010   |
| 0.40309217                   | 0.68129518   | 0.31793322   | --0.51258615 | 0.09738853   | --0.00655184 | 0.00017215   | --0.00000128 |
| 0.10335869                   | 0.34678172   | 0.43127839   | 0.73951628   | --0.36651932 | 0.04283413   | --0.00169250 | 0.00001754   |
| 0.01445527                   | 0.07003483   | 0.12015230   | 0.35174322   | 0.89292741   | --0.24320414 | 0.01608189   | --0.00024450 |
| 0.00110655                   | 0.00679236   | 0.01395319   | 0.05199391   | 0.24076062   | 0.95873833   | --0.14105810 | 0.00351160   |
| 0.00004217                   | 0.00030581   | 0.00070742   | 0.00305401   | 0.01916399   | 0.14063155   | 0.98842986   | --0.05340415 |
| 0.00000054                   | 0.00000440   | 0.00001108   | 0.00005294   | 0.00040343   | 0.00408924   | 0.05336204   | 0.99856678   |
| <i>J</i> = 15, <i>E</i> —    |              |              |              |              |              |              |              |
| 0.75279484                   | 0.60455818   | 0.25768257   | --0.03748227 | 0.00202675   | --0.00004858 | 0.00000046   |              |
| 0.61865675                   | --0.51673722 | --0.57406161 | 0.14336931   | --0.01203345 | 0.00041562   | --0.00000539 |              |
| 0.22093685                   | --0.57892416 | 0.64871420   | --0.43696849 | 0.06519425   | --0.00344421 | 0.00006288   |              |
| 0.04161613                   | --0.17809969 | 0.42018607   | 0.83555055   | --0.30184795 | 0.02710758   | --0.00073412 |              |
| 0.00432555                   | --0.02483092 | 0.08137461   | 0.29644974   | 0.93205960   | 0.18987645   | 0.00850162   |              |
| 0.00023860                   | --0.00167114 | 0.00668115   | 0.03271225   | 0.18882083   | 0.97674280   | --0.09593031 |              |
| 0.00000579                   | --0.00004683 | 0.00021457   | 0.00126534   | 0.01001040   | 0.09577885   | 0.99535147   |              |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

|                          |             |             |             |
|--------------------------|-------------|-------------|-------------|
| <i>KAPPA</i> = -0.600000 |             |             |             |
| <i>J</i> = 2, <i>E</i> + |             |             |             |
| 0.99548493               | -0.09491969 |             |             |
| 0.09491969               | 0.99548493  |             |             |
| <i>J</i> = 3, <i>E</i> + |             |             |             |
| 0.97942806               | -0.20179364 |             |             |
| 0.20179364               | 0.97942806  |             |             |
| <i>J</i> = 3, <i>O</i> + |             |             |             |
| 0.99877555               | -0.04947116 |             |             |
| 0.04947116               | 0.99877555  |             |             |
| <i>J</i> = 3, <i>O</i> - |             |             |             |
| 0.99829437               | -0.05838113 |             |             |
| 0.05838113               | 0.99829437  |             |             |
| <i>J</i> = 4, <i>E</i> + |             |             |             |
| 0.94869586               | -0.31615671 | 0.00459292  |             |
| 0.31598944               | 0.94747649  | -0.04938601 |             |
| 0.01126203               | 0.04830362  | 0.99876921  |             |
| <i>J</i> = 4, <i>O</i> + |             |             |             |
| 0.99543255               | -0.09546742 |             |             |
| 0.09546742               | 0.99543255  |             |             |
| <i>J</i> = 4, <i>O</i> - |             |             |             |
| 0.99215674               | -0.12500000 |             |             |
| 0.12500000               | 0.99215674  |             |             |
| <i>J</i> = 4, <i>E</i> - |             |             |             |
| 0.99880759               | -0.04882006 |             |             |
| 0.04882006               | 0.99880759  |             |             |
| <i>J</i> = 5, <i>E</i> + |             |             |             |
| 0.90862973               | -0.41737555 | 0.01377204  |             |
| 0.41664765               | 0.90382945  | -0.09745290 |             |
| 0.02822688               | 0.09428669  | 0.99514484  |             |
| <i>J</i> = 5, <i>O</i> + |             |             |             |
| 0.98948302               | -0.14462541 | 0.00261499  |             |
| 0.14458909               | 0.98839068  | -0.04666764 |             |
| 0.00416470               | 0.04655494  | 0.99890705  |             |
| <i>J</i> = 5, <i>O</i> - |             |             |             |
| 0.97713417               | -0.21260237 | 0.00300693  |             |
| 0.21250857               | 0.97604251  | -0.04670264 |             |
| 0.00699420               | 0.04627375  | 0.99890431  |             |
| <i>J</i> = 5, <i>E</i> - |             |             |             |
| 0.99548493               | -0.09491969 |             |             |
| 0.09491969               | 0.99548493  |             |             |
| <i>J</i> = 6, <i>E</i> + |             |             |             |
| 0.86762551               | -0.49626619 | 0.03075361  | -0.00023238 |
| 0.49462586               | 0.85514204  | -0.15514696 | 0.00260076  |
| 0.05069284               | 0.14977397  | 0.98638331  | -0.04523218 |
| 0.00120941               | 0.00443982  | 0.04507320  | 0.99897309  |
| <i>J</i> = 6, <i>O</i> + |             |             |             |
| 0.98099439               | -0.19390628 | 0.00709639  |             |
| 0.19376049               | 0.97699708  | -0.08907068 |             |
| 0.01033821               | 0.08875284  | 0.99600003  |             |
| <i>J</i> = 6, <i>O</i> - |             |             |             |
| 0.94785924               | -0.31857229 | 0.00863483  |             |
| 0.31804285               | 0.94386442  | -0.08926757 |             |
| 0.02028807               | 0.08735934  | 0.99597025  |             |



TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

| KAPPA = -0.600000--CONTINUED |              |              |              |              |
|------------------------------|--------------|--------------|--------------|--------------|
| <i>J = 6, E-</i>             |              |              |              |              |
| 0.98906139                   | --0.14748197 | 0.00257728   |              |              |
| 0.14744682                   | 0.98803526   | --0.04523005 |              |              |
| 0.00412417                   | 0.04511531   | 0.99897327   |              |              |
| <i>J = 7, E+</i>             |              |              |              |              |
| 0.83065088                   | --0.55369954 | 0.05861087   | --0.00083678 |              |
| 0.55150790                   | 0.80372742   | --0.22318662 | 0.00700048   |              |
| 0.07646549                   | 0.21744999   | 0.96935471   | --0.08497046 |              |
| 0.00334374                   | 0.01243229   | 0.08428489   | 0.99635853   |              |
| <i>J = 7, O+</i>             |              |              |              |              |
| 0.97047030                   | --0.24078663 | 0.01446268   | --0.00013846 |              |
| 0.24046120                   | 0.96092094   | --0.13712528 | 0.00245367   |              |
| 0.01912193                   | 0.13652615   | 0.98946249   | --0.04425989 |              |
| 0.00039107                   | 0.00365511   | 0.04417539   | 0.99901703   |              |
| <i>J = 7, O-</i>             |              |              |              |              |
| 0.90161874                   | --0.43212215 | 0.01881673   | --0.00015772 |              |
| 0.43040918                   | 0.89204063   | --0.13786015 | 0.00245506   |              |
| 0.04278581                   | 0.13236680   | 0.98928735   | --0.04426002 |              |
| 0.00098018                   | 0.00360393   | 0.04417072   | 0.99901702   |              |
| <i>J = 7, E-</i>             |              |              |              |              |
| 0.97875603                   | --0.20491270 | 0.00688685   |              |              |
| 0.20474936                   | 0.97512059   | --0.08495607 |              |              |
| 0.01069306                   | 0.08456134   | 0.99636090   |              |              |
| <i>J = 8, E+</i>             |              |              |              |              |
| 0.79895306                   | --0.59299403 | 0.10013592   | --0.00221025 | 0.00001208   |
| 0.59234506                   | 0.74718874   | --0.30104742 | 0.01437851   | --0.00013874 |
| 0.10371236                   | 0.29891123   | 0.93977807   | --0.12925718 | 0.00236391   |
| 0.00671263                   | 0.02681075   | 0.12708150   | 0.99054959   | --0.04356526 |
| 0.00011991                   | 0.00057279   | 0.00327493   | 0.04350255   | 0.99904778   |
| <i>J = 8, O+</i>             |              |              |              |              |
| 0.95859641                   | --0.28364322 | 0.02528310   | --0.00046269 |              |
| 0.28315418                   | 0.93996035   | --0.19041375 | 0.00639146   |              |
| 0.03025508                   | 0.18955591   | 0.97795870   | --0.08215818 |              |
| 0.00112329                   | 0.00946681   | 0.08185444   | 0.99659870   |              |
| <i>J = 8, O-</i>             |              |              |              |              |
| 0.84241343                   | --0.53765667 | 0.03556151   | --0.00054719 |              |
| 0.53368393                   | 0.82344665   | --0.19255164 | 0.00639948   |              |
| 0.07423692                   | 0.18103498   | 0.97722315   | --0.08215919 |              |
| 0.00315564                   | 0.00934163   | 0.08181785   | 0.99659852   |              |
| <i>J = 8, E-</i>             |              |              |              |              |
| 0.96421265                   | --0.26476072 | 0.01398983   | --0.00013761 |              |
| 0.26430975                   | 0.95574256   | --0.12919338 | 0.00236383   |              |
| 0.02083637                   | 0.12824613   | 0.99056592   | --0.04356525 |              |
| 0.00041604                   | 0.00329457   | 0.04350300   | 0.99904778   |              |
| <i>J = 9, E+</i>             |              |              |              |              |
| 0.77206439                   | --0.61599995 | 0.15632116   | --0.00493187 | 0.00004974   |
| 0.62176097                   | 0.68122889   | --0.38558852 | 0.02572496   | --0.00045654 |
| 0.13115119                   | 0.39236945   | 0.89280178   | --0.17808475 | 0.00603236   |
| 0.01136225                   | 0.05013451   | 0.17239977   | 0.98041369   | --0.08015446 |
| 0.00036623                   | 0.00199971   | 0.00827588   | 0.07992944   | 0.99676410   |
| <i>J = 9, O+</i>             |              |              |              |              |
| 0.94602152                   | --0.32163940 | 0.03987575   | --0.00114081 | 0.00000738   |
| 0.32119120                   | 0.91394183   | --0.24775872 | 0.01273311   | --0.00013145 |
| 0.04328857                   | 0.24679858   | 0.96015956   | --0.12371297 | 0.00229884   |
| 0.00236377                   | 0.01867488   | 0.12292209   | 0.99130372   | --0.04304363 |
| 0.00003750                   | 0.00035933   | 0.00305374   | 0.04299535   | 0.99907054   |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.600000—CONTINUED |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 9, <i>O</i> —    |             |             |             |             |             |
| 0.77914672                  | -0.62383373 | 0.06131797  | -0.00140775 | 0.00000837  |             |
| 0.61670139                  | 0.74534939  | -0.25292433 | 0.01276527  | -0.00013152 |             |
| 0.11206565                  | 0.23438008  | 0.95770340  | -0.12371814 | 0.00229884  |             |
| 0.00714583                  | 0.01875139  | 0.12273662  | 0.99130232  | -0.04304363 |             |
| 0.00012466                  | 0.00037192  | 0.00305048  | 0.04299531  | 0.99907054  |             |
| <i>J</i> = 9, <i>E</i> —    |             |             |             |             |             |
| 0.94563148                  | -0.32430556 | 0.02463337  | -0.00045072 |             |             |
| 0.32337045                  | 0.92938621  | -0.17786636 | 0.00603181  |             |             |
| 0.03480002                  | 0.17605919  | 0.98049344  | -0.08015439 |             |             |
| 0.00126919                  | 0.00838700  | 0.07993347  | 0.99676411  |             |             |
| <i>J</i> = 10, <i>E</i> +   |             |             |             |             |             |
| 0.74909833                  | 0.62331314  | 0.22413305  | -0.00983757 | 0.00014892  | -0.00000064 |
| 0.64312336                  | -0.60336525 | -0.46964108 | 0.04217493  | -0.00111889 | 0.00000745  |
| 0.15794374                  | -0.49025137 | 0.82536152  | -0.23096804 | 0.01181027  | -0.00012666 |
| 0.01723779                  | -0.08401729 | 0.21845961  | 0.96465919  | -0.11977870 | 0.00224983  |
| 0.00081356                  | -0.00507936 | 0.01597828  | 0.11917462  | 0.99181535  | -0.04263754 |
| 0.00001161                  | -0.00008483 | 0.00029823  | 0.00288405  | 0.04259840  | 0.99908807  |
| <i>J</i> = 10, <i>O</i> +   |             |             |             |             |             |
| 0.93324883                  | -0.35447474 | 0.05821165  | -0.00238373 | 0.00002862  |             |
| 0.35453871                  | 0.88278503  | -0.30741473 | 0.02211118  | -0.00041956 |             |
| 0.05771700                  | 0.30662354  | 0.93491695  | -0.16896069 | 0.00577355  |             |
| 0.00420248                  | 0.03192157  | 0.16727027  | 0.98224137  | -0.07865046 |             |
| 0.00011971                  | 0.00112437  | 0.00765128  | 0.07848303  | 0.99688545  |             |
| <i>J</i> = 10, <i>O</i> —   |             |             |             |             |             |
| 0.71940220                  | 0.68751393  | 0.09887134  | -0.00308550 | 0.00003337  |             |
| 0.67737207                  | -0.66294730 | -0.31807898 | 0.02221577  | -0.00041996 |             |
| 0.15313969                  | -0.29446219 | 0.92803681  | -0.16898104 | 0.00577355  |             |
| 0.01325156                  | -0.03340610 | 0.16655242  | 0.98223359  | -0.07865047 |             |
| 0.00041984                  | -0.00123249 | 0.00762820  | 0.07848263  | 0.99688545  |             |
| <i>J</i> = 10, <i>E</i> —   |             |             |             |             |             |
| 0.92371472                  | -0.38103785 | 0.03949778  | -0.00109752 | 0.00000739  |             |
| 0.37946646                  | 0.89599359  | -0.23035028 | 0.01180775  | -0.00012665 |             |
| 0.05242418                  | 0.22745911  | 0.96496744  | -0.11977830 | 0.00224983  |             |
| 0.00283374                  | 0.01636787  | 0.11919814  | 0.99181546  | -0.04263754 |             |
| 0.00004415                  | 0.00030272  | 0.00288446  | 0.04259840  | 0.99908807  |             |
| <i>J</i> = 11, <i>E</i> +   |             |             |             |             |             |
| 0.72923100                  | 0.61671429  | 0.29590325  | -0.01807659 | 0.00037385  | -0.00000292 |
| 0.65873717                  | -0.51629021 | -0.54339270 | 0.06502794  | -0.00234435 | 0.00002841  |
| 0.18357189                  | -0.58026919 | 0.73941793  | -0.28712619 | 0.02021276  | -0.00039576 |
| 0.02421839                  | -0.12760511 | 0.26400645  | 0.94179769  | -0.16253295 | 0.00558027  |
| 0.00151962                  | -0.01060249 | 0.02695377  | 0.16115001  | 0.98345629  | -0.07748017 |
| 0.00003878                  | -0.00032357 | 0.00092689  | 0.00713648  | 0.07734713  | 0.99697820  |
| <i>J</i> = 11, <i>O</i> +   |             |             |             |             |             |
| 0.92061903                  | -0.38218095 | 0.07986515  | -0.00445744 | 0.00008106  | -0.00000040 |
| 0.38350744                  | 0.84666959  | -0.36719988 | 0.03515538  | -0.00099989 | 0.00000709  |
| 0.07306040                  | 0.36690950  | 0.90145356  | -0.21747834 | 0.01114576  | -0.00012301 |
| 0.00668899                  | 0.04958819  | 0.21436038  | 0.96844883  | -0.11682410 | 0.00221158  |
| 0.00027798                  | 0.00259981  | 0.01472535  | 0.11639012  | 0.99218916  | -0.04231242 |
| 0.00000360                  | 0.00003935  | 0.00026275  | 0.00275842  | 0.04227964  | 0.99910197  |
| <i>J</i> = 11, <i>O</i> —   |             |             |             |             |             |
| 0.66659102                  | 0.72997485  | 0.15085116  | -0.00608662 | 0.00009750  | -0.00000045 |
| 0.71913556                  | -0.57659485 | -0.38616674 | 0.03544974  | -0.00100152 | 0.00000710  |
| 0.19502529                  | -0.36275868 | 0.88482856  | -0.21754413 | 0.01114595  | -0.00012301 |
| 0.02155430                  | -0.05542214 | 0.21209401  | 0.96841477  | -0.11682413 | 0.00221158  |
| 0.00100683                  | -0.00310216 | 0.01461711  | 0.11638751  | 0.99218915  | -0.04231242 |
| 0.00001413                  | -0.00004894 | 0.00026131  | 0.00275838  | 0.04227964  | 0.99910197  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

|                                     |             |             |             |             |              |             |
|-------------------------------------|-------------|-------------|-------------|-------------|--------------|-------------|
| <i>KAPPA</i> = -0.600000 —CONTINUED |             |             |             |             |              |             |
| <i>J</i> = 11, <i>E</i> -           |             |             |             |             |              |             |
| 0.89945454                          | -0.43299297 | 0.05910522  | -0.00227975 | 0.00002810  |              |             |
| 0.43080418                          | 0.85581131  | -0.28563338 | 0.02020346  | -0.00039573 |              |             |
| 0.07321839                          | 0.28164782  | 0.94279693  | -0.16253118 | 0.00558027  |              |             |
| 0.00532357                          | 0.02788752  | 0.16125482  | 0.98345699  | -0.07748017 |              |             |
| 0.00014956                          | 0.00094275  | 0.00713987  | 0.07734717  | 0.99697820  |              |             |
| <i>J</i> = 12, <i>E</i> +           |             |             |             |             |              |             |
| 0.71181040                          | -0.60064731 | 0.36273609  | -0.03115432 | 0.00083339  | -0.00000966  | 0.00000003  |
| 0.67017117                          | 0.42736577  | -0.59920237 | 0.09573901  | -0.00443360 | 0.00007962   | -0.00000040 |
| 0.20774209                          | 0.65169132  | 0.64172096  | -0.34543608 | 0.03176338  | -0.00092567  | 0.00000685  |
| 0.03214594                          | 0.17752290  | 0.30951729  | 0.91007355  | -0.20809599 | 0.01065326   | -0.00012016 |
| 0.00253188                          | 0.01909431  | 0.04204238  | 0.20522967  | 0.97088696  | -0.11452502  | 0.00218088  |
| 0.00009398                          | 0.00086501  | 0.00217780  | 0.01357328  | 0.11478510  | 0.99247375   | -0.04204624 |
| 0.00000112                          | 0.00001180  | 0.00003245  | 0.00023509  | 0.00266081  | 0.04201810   | 0.99911328  |
| <i>J</i> = 12, <i>O</i> +           |             |             |             |             |              |             |
| 0.90833870                          | -0.40501250 | 0.10405161  | -0.00767454 | 0.00019306  | -0.00000172  |             |
| 0.40855810                          | 0.80617519  | -0.42474269 | 0.05245304  | -0.00204049 | 0.00002630   |             |
| 0.08890466                          | 0.42530051  | 0.85949330  | -0.26857337 | 0.01883882  | -0.00037784  |             |
| 0.00983579                          | 0.07169399  | 0.26348161  | 0.94891664  | -0.15769713 | 0.00543028   |             |
| 0.00054204                          | 0.00508595  | 0.02479837  | 0.15674694  | 0.98434260  | -0.07654355  |             |
| 0.00001253                          | 0.00013918  | 0.00080585  | 0.00676215  | 0.07643396  | 0.99705138   |             |
| <i>J</i> = 12, <i>O</i> -           |             |             |             |             |              |             |
| 0.62110920                          | 0.75257936  | 0.21845793  | -0.01112391 | 0.00024024  | -0.00000199  |             |
| 0.74661590                          | -0.48373791 | -0.45357295 | 0.05319510  | -0.00204606 | 0.00002632   |             |
| 0.23613838                          | -0.43817500 | 0.82441323  | -0.26875471 | 0.01883960  | -0.00037784  |             |
| 0.03197994                          | -0.08705867 | 0.25747610  | 0.94879198  | -0.15769728 | 0.00543028   |             |
| 0.00200027                          | -0.00673501 | 0.02441249  | 0.15673388  | 0.98434254  | -0.07654355  |             |
| 0.00005040                          | -0.00019467 | 0.00079667  | 0.00676173  | 0.07643396  | 0.99705138   |             |
| <i>J</i> = 12, <i>E</i> -           |             |             |             |             |              |             |
| 0.87388181                          | -0.47885914 | 0.08370385  | -0.00426267 | 0.00007839  | -0.00000040  |             |
| 0.47638231                          | 0.80924379  | -0.34231050 | 0.03173384  | -0.00092555 | 0.00000685   |             |
| 0.09649382                          | 0.33751860  | 0.91288300  | -0.20808954 | 0.01065324  | -0.00012016  |             |
| 0.00890429                          | 0.04352929  | 0.20561377  | 0.97089039  | -0.11452502 | 0.00218088   |             |
| 0.00036676                          | 0.00219120  | 0.01359177  | 0.11418536  | 0.99247375  | -0.04204624  |             |
| 0.00000469                          | 0.00003205  | 0.00023534  | 0.00266081  | 0.04201810  | 0.99911328   |             |
| <i>J</i> = 13, <i>E</i> +           |             |             |             |             |              |             |
| 0.69634529                          | -0.58052458 | -0.41892602 | -0.05091709 | 0.00170156  | -0.00002668  | 0.00000017  |
| 0.67850902                          | 0.34393096  | 0.63468790  | 0.13582191  | -0.00778752 | 0.00018875   | -0.00000172 |
| 0.23031520                          | 0.70069857  | -0.53883026 | -0.40426174 | 0.04698263  | -0.000185821 | 0.00002487  |
| 0.04084758                          | 0.22973638  | -0.35692157 | 0.86737413  | -0.25593710 | 0.01782827   | -0.00036397 |
| 0.00388493                          | 0.03069039  | -0.06261993 | 0.25036762  | 0.95326510  | -0.15393263  | 0.00531052  |
| 0.00019082                          | 0.00187470  | -0.00446591 | 0.02258244  | 0.15319619  | 0.98501539   | -0.07577694 |
| 0.00000403                          | 0.00004609  | -0.00012157 | 0.00070969  | 0.00647076  | 0.07568413   | 0.99711059  |
| <i>J</i> = 13, <i>O</i> +           |             |             |             |             |              |             |
| 0.89651921                          | -0.42339521 | 0.12975556  | -0.01237423 | 0.00040901  | -0.00000544  | 0.00000002  |
| 0.43018575                          | 0.76228782  | -0.47780254 | 0.07448542  | -0.00376159 | 0.00007184   | -0.00000038 |
| 0.10491423                          | 0.47958070  | 0.80926710  | -0.32128539 | 0.02927573  | -0.00087025  | 0.00000665  |
| 0.01362492                          | 0.09786339  | 0.31381317  | 0.922263104 | -0.20100951 | 0.01027304   | -0.00011786 |
| 0.00094097                          | 0.00887437  | 0.03837785  | 0.19915703  | 0.97266719  | -0.11268484  | 0.00215569  |
| 0.00003155                          | 0.00035736  | 0.00185252  | 0.01276293  | 0.11240845  | 0.99269764   | -0.04182431 |
| 0.00000035                          | 0.00000447  | 0.00002619  | 0.00021558  | 0.00258301  | 0.04179969   | 0.99912265  |
| <i>J</i> = 13, <i>O</i> -           |             |             |             |             |              |             |
| 0.58210102                          | 0.75575808  | 0.29936662  | -0.01916966 | 0.00052828  | -0.00000645  | 0.00000002  |
| 0.76372688                          | -0.38256662 | -0.51433837 | 0.07619582  | -0.00377814 | 0.00007193   | -0.00000038 |
| 0.27550056                          | -0.51527185 | 0.74446839  | -0.32171912 | 0.02927850  | -0.00087026  | 0.00000665  |
| 0.04434839                          | -0.12959714 | 0.30034758  | 0.92223561  | -0.20101010 | 0.01027304   | -0.00011786 |
| 0.00350754                          | -0.01310321 | 0.03728969  | 0.19910332  | 0.97266686  | -0.11268484  | 0.00215569  |
| 0.00012911                          | -0.00056502 | 0.00181549  | 0.01276035  | 0.11240843  | 0.99269764   | -0.04182431 |
| 0.00000151                          | -0.00000740 | 0.00002581  | 0.00021554  | 0.00258301  | 0.04179969   | 0.99912265  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.600000 --CONTINUED |             |             |             |             |             |             |             |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 13, <i>E</i> -     |             |             |             |             |             |             |             |
| 0.84788379                    | -0.51791382 | 0.11315424  | -0.00737827 | 0.00018477  | -0.00000170 |             |             |
| 0.51589092                    | 0.75681683  | -0.39859988 | 0.04689914  | -0.00185776 | 0.00002487  |             |             |
| 0.12149887                    | 0.39359141  | 0.87436390  | -0.25591720 | 0.01782821  | -0.00036397 |             |             |
| 0.01367862                    | 0.06372142  | 0.25157105  | 0.95327909  | -0.15393262 | 0.00531052  |             |             |
| 0.00075117                    | 0.00434992  | 0.02266095  | 0.15319765  | 0.98501540  | -0.07577694 |             |             |
| 0.00001717                    | 0.00011512  | 0.00071161  | 0.00647081  | 0.07568413  | 0.99711059  |             |             |
| <i>J</i> = 14, <i>E</i> +     |             |             |             |             |             |             |             |
| 0.68246861                    | -0.56027089 | -0.46262722 | -0.07936415 | 0.00324361  | -0.00006515 | 0.00000061  | -0.00000000 |
| 0.68451506                    | 0.26986245  | 0.65088930  | 0.18651873  | -0.01292722 | 0.00040023  | -0.00000537 | 0.00000002  |
| 0.25125499                    | 0.72947965  | -0.43322270 | -0.46112086 | 0.06636729  | -0.00337676 | 0.00006667  | -0.00000037 |
| 0.05015166                    | 0.28119493  | -0.40787060 | 0.81121586  | -0.30533559 | 0.02746120  | -0.00082781 | 0.00000650  |
| 0.00559982                    | 0.04524647  | -0.09059482 | 0.29498762  | 0.92972106  | -0.19548812 | 0.00997075  | -0.00011598 |
| 0.00034417                    | 0.00351934  | -0.00844453 | 0.03447033  | 0.19406081  | 0.97401394  | -0.11117858 | 0.00213466  |
| 0.00001052                    | 0.00012691  | -0.00034279 | 0.00160496  | 0.01212614  | 0.11094688  | 0.99287836  | -0.04163643 |
| 0.00000011                    | 0.00000146  | -0.00000428 | 0.00002203  | 0.00020064  | 0.00251958  | 0.04161458  | 0.99913054  |
| <i>J</i> = 14, <i>O</i> +     |             |             |             |             |             |             |             |
| 0.88521028                    | -0.43788034 | 0.15590435  | -0.01888849 | 0.00079433  | -0.00001438 | 0.00000010  |             |
| 0.44886093                    | 0.71625490  | -0.52454759 | 0.10154354  | -0.00644103 | 0.00016625  | -0.00000160 |             |
| 0.12082963                    | 0.52802401  | 0.75139940  | -0.37436484 | 0.04286931  | -0.00172284 | 0.00002375  |             |
| 0.01801576                    | 0.12738894  | 0.36441808  | 0.88864058  | -0.24632093 | 0.01705152  | -0.00035292 |             |
| 0.00150112                    | 0.01420714  | 0.05593454  | 0.24301169  | 0.95645654  | -0.15091807 | 0.00521269  |             |
| 0.00006649                    | 0.00076605  | 0.00365750  | 0.02111696  | 0.15032653  | 0.98554368  | -0.07513790 |             |
| 0.00000129                    | 0.00001716  | 0.00009342  | 0.00064445  | 0.00623927  | 0.07505763  | 0.99715947  |             |
| <i>J</i> = 14, <i>O</i> -     |             |             |             |             |             |             |             |
| 0.54844947                    | 0.74089524  | 0.38637198  | -0.03151149 | 0.00106843  | -0.00001749 | 0.00000012  |             |
| 0.77336169                    | -0.27530740 | -0.56125748 | 0.10519261  | -0.00648520 | 0.00016657  | -0.00000161 |             |
| 0.31252435                    | -0.58452615 | 0.64652130  | -0.37526847 | 0.04287797  | -0.00172287 | 0.00002375  |             |
| 0.05841004                    | -0.18186043 | 0.33888427  | 0.88752838  | -0.24632295 | 0.01705153  | -0.00035292 |             |
| 0.00562011                    | -0.02311305 | 0.05349546  | 0.24282229  | 0.95645509  | -0.15091807 | 0.00521269  |             |
| 0.00027495                    | -0.00135257 | 0.00355354  | 0.02110469  | 0.15032638  | 0.98554368  | -0.07513790 |             |
| 0.00000575                    | -0.00003207 | 0.00009171  | 0.00064415  | 0.00623926  | 0.07505763  | 0.99715947  |             |
| <i>J</i> = 14, <i>E</i> -     |             |             |             |             |             |             |             |
| 0.82212624                    | -0.54990582 | 0.14685833  | -0.01202147 | 0.00038901  | -0.00000530 | 0.00000002  |             |
| 0.54950632                    | 0.69925101  | -0.45244146 | 0.06615252  | -0.00337525 | 0.00006667  | -0.00000037 |             |
| 0.14751922                    | 0.44803696  | 0.82677018  | -0.30528223 | 0.02746095  | -0.00082781 | 0.00000650  |             |
| 0.01968443                    | 0.08862352  | 0.29827933  | 0.92977031  | -0.19548807 | 0.00997075  | -0.00011598 |             |
| 0.00136233                    | 0.00776352  | 0.03474560  | 0.19406745  | 0.97401397  | -0.11117858 | 0.00213466  |             |
| 0.00004534                    | 0.00030286  | 0.00161483  | 0.01212645  | 0.11094688  | 0.99287836  | -0.04163643 |             |
| 0.00000049                    | 0.00000368  | 0.00002213  | 0.00020065  | 0.00251958  | 0.04161458  | 0.99913054  |             |
| <i>J</i> = 15, <i>E</i> +     |             |             |             |             |             |             |             |
| 0.66990363                    | -0.54174153 | -0.49373131 | -0.11806952 | 0.00584827  | -0.00014516 | 0.00000183  | -0.00000001 |
| 0.68873976                    | 0.20581733  | 0.64911234  | 0.24800890  | -0.02051630 | 0.00078217  | -0.00001408 | 0.00000010  |
| 0.27059109                    | 0.74246639  | -0.32395557 | -0.51222879 | 0.09036553  | -0.00571108 | 0.00015173  | -0.00000152 |
| 0.05989782                    | 0.33009117  | -0.46188076 | 0.73907792  | -0.35536959 | 0.03989855  | -0.00162011 | 0.00002286  |
| 0.00768469                    | 0.06247633  | -0.12796141 | 0.33687788  | 0.89937343  | -0.23881791 | 0.01643636  | -0.00034391 |
| 0.00056933                    | 0.00595347  | -0.01505695 | 0.04939905  | 0.23626472  | 0.95886007  | -0.14844957 | 0.00513127  |
| 0.00002296                    | 0.00028651  | -0.00083134 | 0.00311296  | 0.01993667  | 0.14795816  | 0.98596944  | -0.07459702 |
| 0.00000041                    | 0.00000588  | -0.00001882 | 0.00007710  | 0.00059411  | 0.00605095  | 0.07452644  | 0.99720050  |
| <i>J</i> = 15, <i>O</i> +     |             |             |             |             |             |             |             |
| 0.87442423                    | -0.44908165 | 0.18152115  | -0.02749443 | 0.00144029  | -0.00003364 | 0.00000035  | -0.00000000 |
| 0.46500496                    | 0.66936451  | -0.56369843 | 0.13363009  | -0.01041646 | 0.00034453  | -0.00000489 | 0.00000002  |
| 0.13645801                    | 0.56958477  | 0.68675947  | -0.42626754 | 0.06000214  | -0.00309143 | 0.00006269  | -0.00000036 |
| 0.02295253                    | 0.15936272  | 0.41418882  | 0.84615235  | -0.29303614 | 0.02607146  | -0.00079425 | 0.00000637  |
| 0.00224471                    | 0.02124708  | 0.07784885  | 0.28752963  | 0.93499223  | -0.19106215 | 0.00972471  | -0.00011440 |
| 0.00012425                    | 0.00145076  | 0.00653477  | 0.03215365  | 0.18993005  | 0.97506942  | -0.10992287 | 0.00211683  |
| 0.00000349                    | 0.00004746  | 0.00024595  | 0.00144701  | 0.01162177  | 0.10972417  | 0.99302728  | -0.04147532 |
| 0.00000003                    | 0.00000050  | 0.00000290  | 0.00001931  | 0.00018898  | 0.00246689  | 0.04145570  | 0.99913728  |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

|                                      |             |             |             |             |             |             |             |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>KAPPA</i> = -0.600000 --CONTINUED |             |             |             |             |             |             |             |
| <i>J</i> = 15, <i>O</i> --           |             |             |             |             |             |             |             |
| 0.51914567                           | 0.71243835  | -0.46950550 | -0.04979804 | 0.00202470  | -0.00004210 | 0.00000041  | -0.00000000 |
| 0.77758024                           | -0.16852970 | 0.58907382  | 0.14088243  | -0.01052487 | 0.00034553  | -0.00000489 | 0.00000002  |
| 0.34688340                           | -0.63645175 | -0.53656466 | -0.42788628 | 0.06002671  | -0.00309156 | 0.00006269  | -0.00000036 |
| 0.07387625                           | -0.23992950 | -0.37310188 | 0.84333687  | -0.29304214 | 0.02607148  | -0.00079425 | 0.00000637  |
| 0.00840762                           | -0.03720921 | -0.07355084 | 0.28694205  | 0.93498663  | -0.19106216 | 0.00972471  | -0.00011440 |
| 0.00051708                           | -0.00279226 | -0.00633899 | 0.03210488  | 0.18992930  | 0.97506942  | -0.10992287 | 0.00211683  |
| 0.00001570                           | -0.00009750 | -0.00024273 | 0.00144526  | 0.01162174  | 0.10972417  | 0.99302728  | -0.04147532 |
| 0.00000016                           | -0.00000109 | -0.00000290 | 0.00001930  | 0.00018898  | 0.00246689  | 0.04145570  | 0.99913728  |
| <i>J</i> = 15, <i>E</i> --           |             |             |             |             |             |             |             |
| 0.79705549                           | -0.57496245 | 0.18377392  | -0.01863631 | 0.00075354  | -0.00001384 | 0.00000010  |             |
| 0.57768580                           | 0.63755629  | -0.50169163 | 0.08985557  | -0.00570665 | 0.00015170  | -0.00000152 |             |
| 0.17393344                           | 0.49884311  | 0.77013605  | -0.35524460 | 0.03989770  | -0.00162011 | 0.00002286  |             |
| 0.02690186                           | 0.11803320  | 0.34480640  | 0.89952700  | -0.23881771 | 0.01643636  | -0.00034391 |             |
| 0.00225933                           | 0.01278406  | 0.05021682  | 0.23629055  | 0.95886021  | -0.14844957 | 0.00513127  |             |
| 0.00009967                           | 0.00066956  | 0.00315208  | 0.01993832  | 0.14795817  | 0.98596944  | -0.07459702 |             |
| 0.00000192                           | 0.00001461  | 0.00007787  | 0.00059415  | 0.00605095  | 0.07452644  | 0.99720050  |             |
| <i>KAPPA</i> = -0.700000             |             |             |             |             |             |             |             |
| <i>J</i> = 2, <i>E</i> +             |             |             |             |             |             |             |             |
| 0.99756762                           | -0.06970547 |             |             |             |             |             |             |
| 0.06970547                           | 0.99756762  |             |             |             |             |             |             |
| <i>J</i> = 3, <i>E</i> +             |             |             |             |             |             |             |             |
| 0.98844946                           | -0.15155089 |             |             |             |             |             |             |
| 0.15155089                           | 0.98844946  |             |             |             |             |             |             |
| <i>J</i> = 3, <i>O</i> +             |             |             |             |             |             |             |             |
| 0.99931795                           | -0.03692730 |             |             |             |             |             |             |
| 0.03692730                           | 0.99931795  |             |             |             |             |             |             |
| <i>J</i> = 3, <i>O</i> --            |             |             |             |             |             |             |             |
| 0.99913077                           | -0.04168576 |             |             |             |             |             |             |
| 0.04168576                           | 0.99913077  |             |             |             |             |             |             |
| <i>J</i> = 4, <i>E</i> +             |             |             |             |             |             |             |             |
| 0.96897302                           | -0.24715450 | 0.00243879  |             |             |             |             |             |
| 0.24708071                           | 0.96832946  | -0.03590519 |             |             |             |             |             |
| 0.00651258                           | 0.03539374  | 0.99935222  |             |             |             |             |             |
| <i>J</i> = 4, <i>O</i> +             |             |             |             |             |             |             |             |
| 0.99737091                           | -0.07246560 |             |             |             |             |             |             |
| 0.07246560                           | 0.99737091  |             |             |             |             |             |             |
| <i>J</i> = 4, <i>O</i> --            |             |             |             |             |             |             |             |
| 0.99607941                           | -0.08846363 |             |             |             |             |             |             |
| 0.08846363                           | 0.99607941  |             |             |             |             |             |             |
| <i>J</i> = 4, <i>E</i> --            |             |             |             |             |             |             |             |
| 0.99936309                           | -0.03568507 |             |             |             |             |             |             |
| 0.03568507                           | 0.99936309  |             |             |             |             |             |             |
| <i>J</i> = 5, <i>E</i> +             |             |             |             |             |             |             |             |
| 0.93947959                           | -0.34252677 | 0.00731537  |             |             |             |             |             |
| 0.34216463                           | 0.93697632  | -0.07070175 |             |             |             |             |             |
| 0.01736292                           | 0.06892592  | 0.99747067  |             |             |             |             |             |
| <i>J</i> = 5, <i>O</i> +             |             |             |             |             |             |             |             |
| 0.99370364                           | -0.11203158 | 0.00141715  |             |             |             |             |             |
| 0.11201473                           | 0.99312375  | -0.03402825 |             |             |             |             |             |
| 0.00240484                           | 0.03397274  | 0.99941987  |             |             |             |             |             |
| <i>J</i> = 5, <i>O</i> --            |             |             |             |             |             |             |             |
| 0.98869040                           | -0.14996276 | 0.00156878  |             |             |             |             |             |
| 0.14992884                           | 0.98811070  | -0.03403817 |             |             |             |             |             |
| 0.00355433                           | 0.03388842  | 0.99941930  |             |             |             |             |             |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.700000—CONTINUED |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 5, <i>E</i> -    |             |             |             |             |
| 0.99756762                  | -0.06970547 |             |             |             |
| 0.06970547                  | 0.99756762  |             |             |             |
| <i>J</i> = 6, <i>E</i> +    |             |             |             |             |
| 0.90454622                  | -0.42606181 | 0.01635417  | -0.00008993 |             |
| 0.42508581                  | 0.89816536  | -0.11224591 | 0.00137849  |             |
| 0.03313360                  | 0.10846674  | 0.99300045  | -0.03297335 |             |
| 0.00058821                  | 0.00230134  | 0.03291668  | 0.99945528  |             |
| <i>J</i> = 6, <i>O</i> +    |             |             |             |             |
| 0.98812174                  | -0.15362407 | 0.00388342  |             |             |
| 0.15354945                  | 0.98599730  | -0.06505304 |             |             |
| 0.00616468                  | 0.06487662  | 0.99787425  |             |             |
| <i>J</i> = 6, <i>O</i> -    |             |             |             |             |
| 0.97389800                  | -0.22694191 | 0.00447858  |             |             |
| 0.22674662                  | 0.97177504  | -0.06510939 |             |             |
| 0.01042387                  | 0.06442541  | 0.99786808  |             |             |
| <i>J</i> = 6, <i>E</i> -    |             |             |             |             |
| 0.99402242                  | -0.10916750 | 0.00137187  |             |             |
| 0.10915321                  | 0.99347791  | -0.03297291 |             |             |
| 0.00223664                  | 0.03292556  | 0.99945530  |             |             |
| <i>J</i> = 7, <i>E</i> +    |             |             |             |             |
| 0.86935882                  | -0.49318988 | 0.03128706  | -0.00032402 |             |
| 0.49136410                  | 0.85591859  | -0.16109297 | 0.00370772  |             |
| 0.05266475                  | 0.15532960  | 0.98450700  | -0.06200893 |             |
| 0.00172887                  | 0.00631070  | 0.06177496  | 0.99806866  |             |
| <i>J</i> = 7, <i>O</i> +    |             |             |             |             |
| 0.98072165                  | -0.19524552 | 0.00801405  | -0.00005460 |             |
| 0.19505341                  | 0.97563263  | -0.10046613 | 0.00130354  |             |
| 0.01179714                  | 0.10008182  | 0.99438596  | -0.03226494 |             |
| 0.00018001                  | 0.00194771  | 0.03223201  | 0.99947850  |             |
| <i>J</i> = 7, <i>O</i> -    |             |             |             |             |
| 0.94838532                  | -0.31697196 | 0.00969852  | -0.00006003 |             |
| 0.31630200                  | 0.94329998  | -0.10068015 | 0.00130383  |             |
| 0.02276380                  | 0.09854030  | 0.99434933  | -0.03226496 |             |
| 0.00037920                  | 0.00193148  | 0.03223130  | 0.99947850  |             |
| <i>J</i> = 7, <i>E</i> -    |             |             |             |             |
| 0.98814413                  | -0.15348505 | 0.00367570  |             |             |
| 0.15341596                  | 0.98621438  | -0.06200593 |             |             |
| 0.00589196                  | 0.06183471  | 0.99806901  |             |             |
| <i>J</i> = 8, <i>E</i> +    |             |             |             |             |
| 0.83701391                  | -0.54450813 | 0.05401736  | -0.00085651 | 0.00000341  |
| 0.54206323                  | 0.81166670  | -0.21750111 | 0.00760748  | -0.00005359 |
| 0.07457731                  | 0.21102005  | 0.97003880  | -0.09450879 | 0.00125563  |
| 0.00365817                  | 0.01336260  | 0.09379260  | 0.99498865  | -0.03175831 |
| 0.00004876                  | 0.00020487  | 0.00174973  | 0.03173427  | 0.99949479  |
| <i>J</i> = 8, <i>O</i> +    |             |             |             |             |
| 0.97182079                  | -0.23529070 | 0.01423364  | -0.00018366 |             |
| 0.23492774                  | 0.96183429  | -0.14025758 | 0.00339957  |             |
| 0.01931345                  | 0.13959732  | 0.98820279  | -0.05995687 |             |
| 0.00053878                  | 0.00506592  | 0.05983697  | 0.99819516  |             |
| <i>J</i> = 8, <i>O</i> -    |             |             |             |             |
| 0.91044192                  | -0.41323570 | 0.01821347  | -0.00020750 |             |
| 0.41151522                  | 0.90043953  | -0.14089819 | 0.00340122  |             |
| 0.04182162                  | 0.13572002  | 0.98804665  | -0.05995703 |             |
| 0.00129911                  | 0.00499805  | 0.05983133  | 0.99819514  |             |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.700000 —CONTINUED |              |              |             |             |              |
|------------------------------|--------------|--------------|-------------|-------------|--------------|
| <i>J</i> = 8, <i>E</i> -     |              |              |             |             |              |
| 0.97946191                   | -0.20148980  | 0.60749799   | -0.00005336 |             |              |
| 0.20128770                   | 0.97496273   | -0.09449528  | 0.00125562  |             |              |
| 0.01173004                   | 0.09405563   | 0.99499113   | -0.03175831 |             |              |
| 0.00017214                   | 0.00175300   | 0.03173432   | 0.99949479  |             |              |
| <i>J</i> = 9, <i>E</i> +     |              |              |             |             |              |
| 0.80851719                   | --0.58209971 | 0.08634938   | -0.00191305 | 0.00001404  |              |
| 0.58026757                   | 0.76421065   | --0.28122389 | 0.01359153  | -0.00017632 |              |
| 0.09771126                   | 0.27663024   | 0.94702781   | -0.13059964 | 0.00320723  |              |
| 0.00647917                   | 0.02484389   | 0.12874565   | 0.98961817  | -0.05849138 |              |
| 0.00015683                   | 0.00071007   | 0.00445002   | 0.05840572  | 0.99828275  |              |
| <i>J</i> = 9, <i>O</i> +     |              |              |             |             |              |
| 0.96184063                   | --0.27265012 | 0.02289761   | -0.00045647 | 0.00000212  |              |
| 0.27211342                   | 0.94448190   | --0.18401680 | 0.00678572  | -0.00005088 |              |
| 0.02855676                   | 0.18306959   | 0.97851247   | -0.09045384 | 0.00122108  |              |
| 0.00118065                   | 0.01006796   | 0.09013449   | 0.99538357  | -0.03137787 |              |
| 0.00001399                   | 0.00014107   | 0.00162477   | 0.03135927  | 0.99950685  |              |
| <i>J</i> = 9, <i>O</i> -     |              |              |             |             |              |
| 0.86198226                   | --0.50597538 | 0.03122840   | -0.00053181 | 0.00000232  |              |
| 0.50240803                   | 0.84444056   | --0.18563452 | 0.00679231  | -0.00005089 |              |
| 0.06754778                   | 0.17552992   | 0.97797904   | -0.09045463 | 0.00122108  |              |
| 0.00316927                   | 0.00991405   | 0.09010527   | 0.99538341  | -0.03137787 |              |
| 0.00004055                   | 0.00014097   | 0.00162440   | 0.03135927  | 0.99950685  |              |
| <i>J</i> = 9, <i>E</i> -     |              |              |             |             |              |
| 0.96772416                   | --0.25166138 | 0.01328409   | -0.00017513 |             |              |
| 0.25120699                   | 0.95908335   | --0.13055225 | 0.00320714  |             |              |
| 0.02011728                   | 0.12963676   | 0.98963042   | -0.05849138 |             |              |
| 0.00054143                   | 0.00447032   | 0.05840617   | 0.99828275  |             |              |
| <i>J</i> = 10, <i>E</i> +    |              |              |             |             |              |
| 0.78375160                   | --0.60744109 | 0.12936057   | -0.00382072 | 0.00004206  | --0.00000013 |
| 0.60904664                   | 0.71096706   | --0.35084632 | 0.02224169  | -0.00043202 | 0.00000210   |
| 0.12120597                   | 0.35177407   | 0.91246053   | -0.17011865 | 0.00628832  | -0.00004902  |
| 0.01022718                   | 0.04234144   | 0.16587170   | 0.98128523  | -0.08756175 | 0.00119505   |
| 0.00036495                   | 0.00183542   | 0.00866318   | 0.08733443  | 0.99565460  | -0.03108168  |
| 0.00000389                   | 0.00002213   | 0.00011658   | 0.00153417  | 0.03106660  | 0.99951613   |
| <i>J</i> = 10, <i>O</i> +    |              |              |             |             |              |
| 0.95120146                   | --0.30666302 | 0.03424393   | -0.00096302 | 0.00000826  |              |
| 0.30605419                   | 0.92347528   | --0.23105095 | 0.01181816  | -0.00016258 |              |
| 0.03926639                   | 0.22988641   | 0.96449384   | -0.12390559 | 0.00306969  |              |
| 0.00218226                   | 0.01741376   | 0.12319822   | 0.99056570  | -0.05739158 |              |
| 0.00004669                   | 0.00044713   | 0.00407874   | 0.05732717  | 0.99834701  |              |
| <i>J</i> = 10, <i>O</i> -    |              |              |             |             |              |
| 0.80819247                   | --0.58677495 | 0.05018705   | -0.00116118 | 0.00000924  |              |
| 0.58058344                   | 0.77957395   | --0.23462122 | 0.01183961  | -0.00016264 |              |
| 0.09852808                   | 0.21831380   | 0.96294781   | -0.12390880 | 0.00306970  |              |
| 0.00632427                   | 0.01727677   | 0.12308144   | 0.99056483  | -0.05739158 |              |
| 0.00014771                   | 0.00045434   | 0.00407600   | 0.05732714  | 0.99834701  |              |
| <i>J</i> = 10, <i>E</i> -    |              |              |             |             |              |
| 0.95296760                   | --0.30230924 | 0.02148703   | -0.00042763 | 0.00000209  |              |
| 0.30145537                   | 0.93818553   | --0.16997948 | 0.00628795  | -0.00004902 |              |
| 0.03123851                   | 0.16834641   | 0.98133336   | -0.08756171 | 0.00119505  |              |
| 0.00125227                   | 0.00874652   | 0.08733709   | 0.99565461  | -0.03108168 |              |
| 0.00001438                   | 0.00011735   | 0.00153420   | 0.03106660  | 0.99951613  |              |
| <i>J</i> = 11, <i>E</i> +    |              |              |             |             |              |
| 0.76220557                   | --0.62107045 | 0.18238610   | -0.00703282 | 0.00010572  | --0.00000060 |
| 0.63083543                   | 0.64958890   | --0.42297670 | 0.03421722  | -0.00090493 | 0.00000800   |
| 0.14445519                   | 0.43332983   | 0.86369696   | -0.21276556 | 0.01078467  | -0.00015331  |
| 0.01488354                   | 0.06719288   | 0.20405213   | 0.96923837  | -0.11914070 | 0.00296687   |
| 0.00071110                   | 0.00401587   | 0.01470295   | 0.11862988  | 0.99121030  | -0.05653576  |
| 0.00001362                   | 0.00008869   | 0.00036233   | 0.00380443  | 0.05648455  | 0.99839616   |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.700000—CONTINUED |             |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 11, <i>O</i> +   |             |             |             |             |             |             |
| 0.94025882                  | -0.33700578 | 0.04834402  | -0.00182175 | 0.00002353  | -0.00000008 |             |
| 0.33657907                  | 0.89874423  | -0.28038735 | 0.01887101  | -0.00038803 | 0.00000200  |             |
| 0.05113600                  | 0.27915546  | 0.94539042  | -0.16018452 | 0.00593466  | -0.00004761 |             |
| 0.00360335                  | 0.02751420  | 0.15881059  | 0.98321723  | -0.08539135 | 0.00117473  |             |
| 0.00011313                  | 0.00105346  | 0.00787004  | 0.08522450  | 0.99585257  | -0.03084454 |             |
| 0.00000110                  | 0.00001164  | 0.00010181  | 0.00146673  | 0.03083190  | 0.99952350  |             |
| <i>J</i> = 11, <i>O</i> -   |             |             |             |             |             |             |
| 0.75465309                  | -0.65161575 | 0.07674910  | -0.00228199 | 0.00002692  | -0.00000009 |             |
| 0.64245913                  | 0.71013084  | -0.28740548 | 0.01893135  | -0.00038827 | 0.00000200  |             |
| 0.13275661                  | 0.26519795  | 0.94146056  | -0.16019524 | 0.00593468  | -0.00004761 |             |
| 0.01097835                  | 0.02792706  | 0.15842329  | 0.98321338  | -0.08539135 | 0.00117473  |             |
| 0.00038018                  | 0.00110834  | 0.00785650  | 0.08522428  | 0.99585257  | -0.03084454 |             |
| 0.00000393                  | 0.00001253  | 0.00010168  | 0.00146673  | 0.03083190  | 0.99952350  |             |
| <i>J</i> = 11, <i>E</i> -   |             |             |             |             |             |             |
| 0.93551643                  | -0.35178015 | 0.03254134  | -0.00089165 | 0.00000795  |             |             |
| 0.35038770                  | 0.91213706  | -0.21241030 | 0.01078328  | -0.00015331 |             |             |
| 0.04507210                  | 0.20983973  | 0.96939803  | -0.11914049 | 0.00296687  |             |             |
| 0.00244435                  | 0.01496173  | 0.11864197  | 0.99121035  | -0.05653576 |             |             |
| 0.00005083                  | 0.00036653  | 0.00380471  | 0.05648455  | 0.99839616  |             |             |
| <i>J</i> = 12, <i>E</i> +   |             |             |             |             |             |             |
| 0.74331793                  | 0.62344806  | 0.24216354  | -0.01215480 | 0.00023601  | -0.00000199 | 0.00000001  |
| 0.64742299                  | -0.57977013 | -0.49211876 | 0.05026199  | -0.00171080 | 0.00002242  | -0.00000008 |
| 0.16704695                  | -0.51494747 | 0.80000759  | -0.25811489 | 0.01699577  | -0.00035903 | 0.00000193  |
| 0.02038957                  | -0.09973932 | 0.24215698  | 0.95263480  | -0.15313747 | 0.00567206  | -0.00004651 |
| 0.00123169                  | -0.00775972 | 0.02287121  | 0.15210818  | 0.98451552  | -0.08370256 | 0.00115842  |
| 0.00003451                  | -0.00025537 | 0.00084268  | 0.00726084  | 0.08357188  | 0.99600341  | -0.03065039 |
| 0.00000031                  | -0.00000253 | 0.00000901  | 0.00009119  | 0.00141454  | 0.03063953  | 0.99952949  |
| <i>J</i> = 12, <i>O</i> +   |             |             |             |             |             |             |
| 0.92928119                  | -0.36358299 | 0.06506736  | -0.00318058 | 0.00005644  | -0.00000036 |             |
| 0.36377003                  | 0.87031155  | -0.33079613 | 0.02832784  | -0.00079350 | 0.00000743  |             |
| 0.06385696                  | 0.32970607  | 0.92059711  | -0.19903793 | 0.01005194  | -0.00014637 |             |
| 0.00548362                  | 0.04067752  | 0.19663221  | 0.97277330  | -0.11556305 | 0.00288708  |             |
| 0.00022971                  | 0.00211297  | 0.01329666  | 0.11519748  | 0.99167984  | -0.05585081 |             |
| 0.00000399                  | 0.00004230  | 0.00031265  | 0.00360169  | 0.05580859  | 0.99843494  |             |
| <i>J</i> = 12, <i>O</i> -   |             |             |             |             |             |             |
| 0.70499771                  | 0.70019141  | 0.11266295  | -0.00415544 | 0.00006616  | -0.00000040 |             |
| 0.68870336                  | -0.63804145 | -0.34318950 | 0.02848017  | -0.00079434 | 0.00000743  |             |
| 0.16843012                  | -0.31745742 | 0.91165924  | -0.19906894 | 0.01005202  | -0.00014637 |             |
| 0.01722091                  | -0.04301569 | 0.19552479  | 0.97275896  | -0.11556306 | 0.00288708  |             |
| 0.00080331                  | -0.00234992 | 0.01324416  | 0.11519640  | 0.99167984  | -0.05585081 |             |
| 0.00001499                  | -0.00004858 | 0.00031172  | 0.00360166  | 0.05580859  | 0.99843494  |             |
| <i>J</i> = 12, <i>E</i> -   |             |             |             |             |             |             |
| 0.91590975                  | -0.39864021 | 0.04682414  | -0.00167566 | 0.00002223  | -0.00000008 |             |
| 0.39663693                  | 0.88101219  | -0.25730884 | 0.01699136  | -0.00035902 | 0.00000193  |             |
| 0.06140331                  | 0.25367391  | 0.95309819  | -0.15313671 | 0.00567206  | -0.00004651 |             |
| 0.00425342                  | 0.02350151  | 0.15215372  | 0.98451581  | -0.08370256 | 0.00115842  |             |
| 0.00013026                  | 0.00085659  | 0.00726244  | 0.08357189  | 0.99600341  | -0.03065039 |             |
| 0.00000123                  | 0.00000910  | 0.00009121  | 0.00141454  | 0.03063953  | 0.99952949  |             |
| <i>J</i> = 13, <i>E</i> +   |             |             |             |             |             |             |
| 0.72659837                  | 0.61617132  | 0.30329644  | -0.01996867 | 0.00048270  | -0.00000550 | 0.00000003  |
| 0.66009638                  | -0.50429958 | -0.55215495 | 0.07120808  | -0.00300376 | 0.00095315  | -0.00000035 |
| 0.18871407                  | -0.58870020 | 0.72373520  | -0.30559648 | 0.02523278  | -0.00072194 | 0.00000702  |
| 0.02665968                  | -0.13879507 | 0.27967130  | 0.93051736  | -0.18935709 | 0.00951124  | -0.00014100 |
| 0.00195901                  | -0.01350799 | 0.03353589  | 0.18743348  | 0.97510550  | -0.11277869 | 0.00282337  |
| 0.00007304                  | -0.00060231 | 0.00168724  | 0.01214507  | 0.11249598  | 0.99203676  | -0.05529021 |
| 0.00000116                  | -0.00001081 | 0.00003280  | 0.00027611  | 0.00344525  | 0.05525442  | 0.99846632  |



TABLE I. -- TRANSFORMATION COEFFICIENTS -- CONTINUED

| KAPPA = -0.700000 -- CONTINUED |             |             |             |             |             |             |             |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J = 13, O+</i>              |             |             |             |             |             |             |             |
| 0.91845419                     | -0.38645335 | 0.08407437  | -0.00521512 | 0.00012053  | -0.00000115 | 0.00000000  |             |
| 0.38785159                     | 0.83837097  | -0.38086423 | 0.04056530  | -0.00146693 | 0.00002031  | -0.00000008 |             |
| 0.07714510                     | 0.38015595  | 0.88973903  | -0.24010209 | 0.01566570  | -0.00033755 | 0.00000188  |             |
| 0.00784259                     | 0.05705180  | 0.23624360  | 0.95863757  | -0.14783991 | 0.00546933  | -0.00004562 |             |
| 0.00041432                     | 0.00380157  | 0.02066020  | 0.14712513  | 0.98545915  | -0.08235101 | 0.00114504  |             |
| 0.00001048                     | 0.00011228  | 0.00072002  | 0.00681480  | 0.08224455  | 0.99612214  | -0.03048850 |             |
| 0.00000009                     | 0.00000103  | 0.00000738  | 0.00008353  | 0.60137298  | 0.03047901  | 0.99953446  |             |
| <i>J = 13, O-</i>              |             |             |             |             |             |             |             |
| 0.66065925                     | 0.73352949  | 0.15941419  | -0.00713680 | 0.00014512  | -0.00000130 | 0.00000000  |             |
| 0.72193321                     | -0.56277144 | -0.40053003 | 0.04091816  | -0.00146940 | 0.00002032  | -0.00000008 |             |
| 0.20423577                     | -0.37565132 | 0.87134443  | -0.24018155 | 0.01566600  | -0.00033755 | 0.00000188  |             |
| 0.02504666                     | -0.06393831 | 0.23345515  | 0.95859099  | -0.14783996 | 0.00546933  | -0.00004562 |             |
| 0.00148654                     | -0.00455577 | 0.02049093  | 0.14712058  | 0.98545913  | -0.08235101 | 0.00114504  |             |
| 0.00004071                     | -0.00013039 | 0.00071563  | 0.00681464  | 0.08224455  | 0.99612214  | -0.03048850 |             |
| 0.00000035                     | -0.00000132 | 0.00000734  | 0.00008353  | 0.60137298  | 0.03047901  | 0.99953446  |             |
| <i>J = 13, E-</i>              |             |             |             |             |             |             |             |
| 0.89478881                     | -0.44178104 | 0.06460625  | -0.00291962 | 0.00005255  | -0.00000035 | 0.00000000  |             |
| 0.43923474                     | 0.84501484  | -0.30395095 | 0.02522032  | -0.00072189 | 0.00000702  | -0.00000008 |             |
| 0.07987207                     | 0.29928178  | 0.93172164  | -0.18935463 | 0.00951123  | -0.00014100 | 0.00000188  |             |
| 0.00679676                     | 0.03474061  | 0.18758169  | 0.97510666  | -0.11277869 | 0.00282337  | -0.00004562 |             |
| 0.00027886                     | 0.00171653  | 0.01215209  | 0.11249607  | 0.99203676  | -0.05529021 | 0.00114504  |             |
| 0.00000473                     | 0.00003298  | 0.00027623  | 0.00344526  | 0.05525442  | 0.99846632  | -0.03048850 |             |
| <i>J = 14, E+</i>              |             |             |             |             |             |             |             |
| 0.71165151                     | -0.60226753 | 0.36032776  | -0.03144843 | 0.00092205  | -0.00001344 | 0.00000009  | -0.00000000 |
| 0.66978370                     | 0.42807434  | -0.59876565 | 0.09796425  | -0.00498369 | 0.00011272  | -0.00000110 | 0.00000000  |
| 0.26929620                     | 0.64841596  | 0.63940130  | -0.35444829 | 0.03581209  | -0.00131477 | 0.00001884  | -0.00000008 |
| 0.03359283                     | 0.18198625  | 0.31712107  | 0.90177875  | -0.22752129 | 0.01469001  | -0.00032108 | 0.00000183  |
| 0.00291945                     | 0.02150398  | 0.04726827  | 0.22411103  | 0.96248994  | -0.14371484 | 0.00530815  | -0.00004489 |
| 0.00013697                     | 0.00122757  | 0.00308305  | 0.01869093  | 0.14316812  | 0.98617468  | -0.08124483 | 0.00113387  |
| 0.00000316                     | 0.00003244  | 0.00008897  | 0.00062744  | 0.00647101  | 0.08115549  | 0.99621800  | -0.03035146 |
| 0.00000002                     | 0.00000027  | 0.00000080  | 0.00000623  | 0.00007773  | 0.00133913  | 0.03034303  | 0.99953864  |
| <i>J = 14, O+</i>              |             |             |             |             |             |             |             |
| 0.90789631                     | -0.40578992 | 0.10484652  | -0.00812315 | 0.00023627  | -0.00000305 | 0.00000002  |             |
| 0.40911303                     | 0.80333593  | -0.42911933 | 0.05592987  | -0.00252122 | 0.00004708  | -0.00000033 |             |
| 0.09075380                     | 0.42904643  | 0.85271555  | -0.28289291 | 0.02302725  | -0.00066937 | 0.00000670  |             |
| 0.01068161                     | 0.07658515  | 0.27716788  | 0.94019625  | -0.18206275 | 0.00909574  | -0.00013672 |             |
| 0.00068523                     | 0.00630346  | 0.03026442  | 0.18077722  | 0.97679808  | -0.11054990 | 0.00277132  |             |
| 0.00002301                     | 0.00025008  | 0.00142550  | 0.01131433  | 0.11032207  | 0.99231718  | -0.05482289 |             |
| 0.00000034                     | 0.00000411  | 0.00002635  | 0.00025013  | 0.00332112  | 0.05479192  | 0.99849224  |             |
| <i>J = 14, O-</i>              |             |             |             |             |             |             |             |
| 0.62168743                     | 0.75236686  | 0.21751306  | -0.01169730 | 0.00029284  | -0.00000352 | 0.00000002  |             |
| 0.74501946                     | -0.48263030 | -0.45693953 | 0.05669101  | -0.00252783 | 0.00004711  | -0.00000033 |             |
| 0.23929541                     | -0.43871476 | 0.81829354  | -0.28307598 | 0.02302819  | -0.00066938 | 0.00000670  |             |
| 0.03438317                     | -0.09205041 | 0.27092449  | 0.94006105  | -0.18206293 | 0.00909574  | -0.00013672 |             |
| 0.00249848                     | -0.00824979 | 0.02979854  | 0.18076078  | 0.97679800  | -0.11054990 | 0.00277132  |             |
| 0.00009136                     | -0.00034536 | 0.00140940  | 0.01131356  | 0.11032207  | 0.99231718  | -0.05482289 |             |
| 0.00000142                     | -0.00000590 | 0.00002612  | 0.00025011  | 0.00332112  | 0.05479192  | 0.99849224  |             |
| <i>J = 14, E-</i>              |             |             |             |             |             |             |             |
| 0.87278759                     | -0.48044053 | 0.08599818  | -0.00479756 | 0.00011104  | -0.00000109 | 0.00000000  |             |
| 0.47763070                     | 0.80342339  | -0.35141143 | 0.03577995  | -0.00131461 | 0.00001884  | -0.00000008 |             |
| 0.10003588                     | 0.34593105  | 0.90462472  | -0.22751428 | 0.01468999  | -0.00032108 | 0.00000183  |             |
| 0.01016269                     | 0.04900964  | 0.22453890  | 0.96249412  | -0.14371484 | 0.00530815  | -0.00004489 |             |
| 0.00052823                     | 0.00310836  | 0.01871691  | 0.14316853  | 0.98617468  | -0.08124483 | 0.00113387  |             |
| 0.00001309                     | 0.00008809  | 0.00062812  | 0.00647103  | 0.08115549  | 0.99621800  | -0.03035146 |             |
| 0.00000011                     | 0.00000078  | 0.00000624  | 0.00007773  | 0.00133913  | 0.03034303  | 0.99953864  |             |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

|                                    |             |             |             |             |             |             |              |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| <i>KAPPA</i> = -0.700000—CONTINUED |             |             |             |             |             |             |              |
| <i>J</i> = 15, <i>E</i> +          |             |             |             |             |             |             |              |
| 0.69816750                         | -0.58516912 | -0.40970316 | -0.04774710 | 0.00166650  | -0.00003000 | 0.00000027  | --0.00000000 |
| 0.67716230                         | 0.35570754  | 0.63053828  | 0.13146220  | -0.00790446 | 0.00022034  | -0.00000289 | 0.00000002   |
| 0.22871054                         | 0.69182286  | -0.55113407 | -0.40362517 | 0.04904697  | -0.00222982 | 0.00004294  | -0.00000031  |
| 0.04108177                         | 0.22675024  | -0.35576586 | 0.86512219  | -0.26726709 | 0.02141888  | -0.00062942 | 0.00000645   |
| 0.00413254                         | 0.03177591  | -0.06494962 | 0.26144135  | 0.94615919  | -0.17637768 | 0.00876665  | -0.00013323  |
| 0.00023506                         | 0.00223493  | -0.00530957 | 0.02711329  | 0.17540313  | 0.97807807  | -0.10872543 | 0.00272800   |
| 0.00000718                         | 0.00007916  | -0.00020759 | 0.00122614  | 0.01067283  | 0.10853592  | 0.99254328  | -0.05442736  |
| 0.00000010                         | 0.00000119  | -0.00000336 | 0.00002192  | 0.00023053  | 0.00322028  | 0.05440012  | 0.99851400   |
| <i>J</i> = 15, <i>O</i> +          |             |             |             |             |             |             |              |
| 0.89767669                         | -0.42185792 | 0.12674981  | -0.01211456 | 0.00043305  | -0.00000718 | 0.00000005  | -0.00000000  |
| 0.42785997                         | 0.76583005  | -0.47417534 | 0.07470697  | -0.00409718 | 0.00009777  | -0.00000101 | 0.00000000   |
| 0.10447800                         | 0.47501493  | 0.80969258  | -0.32679130 | 0.03238962  | -0.00120376 | 0.00001772  | -0.00000007  |
| 0.01398694                         | 0.09901975  | 0.31888120  | 0.91688924  | -0.21800352 | 0.01394327  | -0.00030805 | 0.00000180   |
| 0.00106002                         | 0.00979227  | 0.04240749  | 0.21583687  | 0.96528592  | -0.14041131 | 0.00517694  | -0.00004428  |
| 0.00004471                         | 0.00049378  | 0.00255854  | 0.01730580  | 0.13997524  | 0.98673585  | -0.08032274 | 0.00112440   |
| 0.00000095                         | 0.00001189  | 0.00006961  | 0.00056289  | 0.00619897  | 0.08024607  | 0.99629701  | -0.03023395  |
| 0.00000001                         | 0.00000009  | 0.00000059  | 0.00000545  | 0.00007320  | 0.00131103  | 0.03022637  | 0.99954222   |
| <i>J</i> = 15, <i>O</i> -          |             |             |             |             |             |             |              |
| 0.58753179                         | 0.75694481  | 0.28548257  | -0.01844855 | 0.00055382  | -0.00000845 | 0.00000006  | -0.00000000  |
| 0.76039983                         | -0.39650758 | -0.50866751 | 0.07625138  | -0.00411339 | 0.00009788  | -0.00000101 | 0.00000000   |
| 0.27303544                         | -0.50320169 | 0.75109695  | -0.32717328 | 0.03239229  | -0.00120377 | 0.00001772  | -0.00000007  |
| 0.04510970                         | -0.12808673 | 0.30642794  | 0.91648270  | -0.21800409 | 0.01394327  | -0.00030805 | 0.00000180   |
| 0.00390251                         | -0.01405567 | 0.04130427  | 0.21578413  | 0.96528557  | -0.14041131 | 0.00517694  | -0.00004428  |
| 0.00018025                         | -0.00075666 | 0.00251112  | 0.01730264  | 0.13997521  | 0.98673585  | -0.08032274 | 0.00112440   |
| 0.00000408                         | -0.00001907 | 0.00006867  | 0.00056281  | 0.00619897  | 0.08024607  | 0.99629701  | -0.03023395  |
| 0.00000003                         | -0.00000015 | 0.00000059  | 0.00000545  | 0.00007320  | 0.00131103  | 0.03022637  | 0.99954222   |
| <i>J</i> = 15, <i>E</i> -          |             |             |             |             |             |             |              |
| 0.85045709                         | -0.51416663 | 0.11090014  | -0.00751829 | 0.00021604  | -0.00000286 | 0.00000002  | -0.00000000  |
| 0.51163407                         | 0.75958312  | -0.39857373 | 0.04897014  | -0.00222934 | 0.00004293  | -0.00000031 | 0.00000000   |
| 0.12142877                         | 0.39269593  | 0.87130000  | -0.26724915 | 0.02141881  | -0.00062942 | 0.00000645  | -0.00000031  |
| 0.01440578                         | 0.06654882  | 0.26255526  | 0.94617256  | -0.17637767 | 0.00876665  | -0.00013323 | 0.00000645   |
| 0.00091362                         | 0.00522401  | 0.02719690  | 0.17540473  | 0.97807808  | -0.10872543 | 0.00272800  | -0.00013323  |
| 0.00003014                         | 0.00019897  | 0.00122908  | 0.01067290  | 0.10853592  | 0.99254328  | -0.05442736 | 0.00272800   |
| 0.00000043                         | 0.00000316  | 0.00002196  | 0.00023053  | 0.00322028  | 0.05440012  | 0.99851400  | -0.05442736  |
| <i>KAPPA</i> = -0.800000           |             |             |             |             |             |             |              |
| <i>J</i> = 2, <i>E</i> +           |             |             |             |             |             |             |              |
| 0.99896712                         | -0.04543900 |             |             |             |             |             |              |
| 0.04543900                         | 0.99896712  |             |             |             |             |             |              |
| <i>J</i> = 3, <i>E</i> +           |             |             |             |             |             |             |              |
| 0.99494979                         | -0.10037384 |             |             |             |             |             |              |
| 0.10037384                         | 0.99494979  |             |             |             |             |             |              |
| <i>J</i> = 3, <i>O</i> +           |             |             |             |             |             |             |              |
| 0.99970006                         | -0.02449049 |             |             |             |             |             |              |
| 0.02449049                         | 0.99970006  |             |             |             |             |             |              |
| <i>J</i> = 3, <i>O</i> -           |             |             |             |             |             |             |              |
| 0.99964883                         | -0.02649933 |             |             |             |             |             |              |
| 0.02649933                         | 0.99964883  |             |             |             |             |             |              |
| <i>J</i> = 4, <i>E</i> +           |             |             |             |             |             |             |              |
| 0.98559923                         | -0.16909497 | 0.00102567  |             |             |             |             |              |
| 0.16907285                         | 0.98532929  | -0.02324986 |             |             |             |             |              |
| 0.00292081                         | 0.02308846  | 0.99972916  |             |             |             |             |              |
| <i>J</i> = 4, <i>O</i> +           |             |             |             |             |             |             |              |
| 0.99880759                         | -0.04882006 |             |             |             |             |             |              |
| 0.04882006                         | 0.99880759  |             |             |             |             |             |              |
| <i>J</i> = 4, <i>O</i> -           |             |             |             |             |             |             |              |
| 0.99845110                         | -0.05563629 |             |             |             |             |             |              |
| 0.05563629                         | 0.99845110  |             |             |             |             |             |              |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

| KAPPA = -0.800000 --CONTINUED |             |             |             |  |
|-------------------------------|-------------|-------------|-------------|--|
| <i>J = 4, E--</i>             |             |             |             |  |
| 0.99973108                    | -0.02318962 |             |             |  |
| 0.02318962                    | 0.99973108  |             |             |  |
| <i>J = 5, E+</i>              |             |             |             |  |
| 0.96930735                    | -0.24583286 | 0.00307693  |             |  |
| 0.24571337                    | 0.96826402  | -0.04571364 |             |  |
| 0.00825863                    | 0.04506661  | 0.99894985  |             |  |
| <i>J = 5, O+</i>              |             |             |             |  |
| 0.99703310                    | -0.07697157 | 0.00060733  |             |  |
| 0.07696619                    | 0.99678927  | -0.02207622 |             |  |
| 0.00109387                    | 0.02205746  | 0.99975611  |             |  |
| <i>J = 5, O--</i>             |             |             |             |  |
| 0.99562435                    | -0.09344369 | 0.00064868  |             |  |
| 0.09343520                    | 0.99538054  | -0.02207798 |             |  |
| 0.00141737                    | 0.02204198  | 0.99975604  |             |  |
| <i>J = 5, E--</i>             |             |             |             |  |
| 0.99896712                    | -0.04543900 |             |             |  |
| 0.04543900                    | 0.99896712  |             |             |  |
| <i>J = 6, E+</i>              |             |             |             |  |
| 0.94637918                    | -0.32298467 | 0.00688058  | -0.00002453 |  |
| 0.32261585                    | 0.94375587  | -0.07241231 | 0.00057907  |  |
| 0.01689412                    | 0.07074497  | 0.99712197  | -0.02138941 |  |
| 0.00019780                    | 0.00095899  | 0.02137485  | 0.99977105  |  |
| <i>J = 6, O+</i>              |             |             |             |  |
| 0.99415081                    | -0.10798770 | 0.00167849  |             |  |
| 0.10796194                    | 0.99325703  | -0.04224556 |             |  |
| 0.00289482                    | 0.04217967  | 0.99910585  |             |  |
| <i>J = 6, O--</i>             |             |             |             |  |
| 0.99001627                    | -0.14094110 | 0.00184079  |             |  |
| 0.14089246                    | 0.98912273  | -0.04225562 |             |  |
| 0.00413479                    | 0.04209310  | 0.99910514  |             |  |
| <i>J = 6, E--</i>             |             |             |             |  |
| 0.99743669                    | -0.07155217 | 0.00057790  |             |  |
| 0.07154814                    | 0.99720778  | -0.02138936 |             |  |
| 0.00095417                    | 0.02137588  | 0.99977105  |             |  |
| <i>J = 7, E+</i>              |             |             |             |  |
| 0.91905180                    | -0.39391644 | 0.01317611  | -0.00008842 |  |
| 0.39308397                    | 0.91364288  | -0.10363037 | 0.00155676  |  |
| 0.02878151                    | 0.10039838  | 0.99371598  | -0.04025354 |  |
| 0.00062839                    | 0.00258634  | 0.04019570  | 0.99918828  |  |
| <i>J = 7, O+</i>              |             |             |             |  |
| 0.99004262                    | -0.14072441 | 0.00350086  | -0.00001515 |  |
| 0.14065085                    | 0.98789889  | -0.06536679 | 0.00054840  |  |
| 0.00574025                    | 0.06520542  | 0.99763583  | -0.02092990 |  |
| 0.00005803                    | 0.00082103  | 0.02092090  | 0.99978080  |  |
| <i>J = 7, O--</i>             |             |             |             |  |
| 0.98007945                    | -0.19856633 | 0.00396007  | -0.00001611 |  |
| 0.19839653                    | 0.97793693  | -0.06540545 | 0.00054843  |  |
| 0.00911457                    | 0.06488529  | 0.99763158  | -0.02092990 |  |
| 0.00009778                    | 0.00081869  | 0.02092085  | 0.99978080  |  |
| <i>J = 7, E--</i>             |             |             |             |  |
| 0.99483884                    | -0.10145582 | 0.00155109  |             |  |
| 0.10143583                    | 0.99402739  | -0.04025319 |             |  |
| 0.00254209                    | 0.04020277  | 0.99918831  |             |  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.800000 —CONTINUED |             |             |             |             |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 8, <i>E</i> +     |             |             |             |             |             |
| 0.89023257                   | -0.45493433 | 0.02281809  | -0.00023385 | 0.00000060  |             |
| 0.45343262                   | 0.88029326  | -0.13954372 | 0.00319197  | -0.00001460 |             |
| 0.04339100                   | 0.13449850  | 0.98805539  | -0.06142996 | 0.00052820  |             |
| 0.00142909                   | 0.00535618  | 0.06126078  | 0.99789377  | -0.02060116 |             |
| 0.00001261                   | 0.00005244  | 0.00073826  | 0.02059464  | 0.99978763  |             |
| <i>J</i> = 8, <i>O</i> +     |             |             |             |             |             |
| 0.98471367                   | -0.17406691 | 0.00630000  | -0.00005127 |             |             |
| 0.17390717                   | 0.98049605  | -0.09155187 | 0.00143125  |             |             |
| 0.00975937                   | 0.09123391  | 0.99502076  | -0.03892070 |             |             |
| 0.00018156                   | 0.00214025  | 0.03888777  | 0.99924128  |             |             |
| <i>J</i> = 8, <i>O</i> -     |             |             |             |             |             |
| 0.96403347                   | -0.26567825 | 0.00738463  | -0.00005549 |             |             |
| 0.26521919                   | 0.95981946  | -0.09166971 | 0.00143144  |             |             |
| 0.01726637                   | 0.09031691  | 0.99500247  | -0.03892071 |             |             |
| 0.00034613                   | 0.00212815  | 0.03888734  | 0.99924128  |             |             |
| <i>J</i> = 8, <i>E</i> -     |             |             |             |             |             |
| 0.99086771                   | -0.13480031 | 0.00317262  | -0.00001458 |             |             |
| 0.13473951                   | 0.98897499  | -0.06142838 | 0.00052820  |             |             |
| 0.00514300                   | 0.06129268  | 0.99789396  | -0.02060116 |             |             |
| 0.00004924                   | 0.00073851  | 0.02059464  | 0.99978763  |             |             |
| <i>J</i> = 9, <i>E</i> +     |             |             |             |             |             |
| 0.86222327                   | -0.50519252 | 0.03675969  | -0.00052265 | 0.00000248  |             |
| 0.50295477                   | 0.84527899  | -0.18029828 | 0.00569750  | -0.00004803 |             |
| 0.06000202                   | 0.17375026  | 0.97927194  | -0.08506028 | 0.00135002  |             |
| 0.00269897                   | 0.00973499  | 0.08464144  | 0.99563658  | -0.03796811 |             |
| 0.00004352                   | 0.00017704  | 0.00188425  | 0.03794494  | 0.99927804  |             |
| <i>J</i> = 9, <i>O</i> +     |             |             |             |             |             |
| 0.97827822                   | -0.20704018 | 0.01029906  | -0.00012830 | 0.00000038  |             |
| 0.20675259                   | 0.97091215  | -0.12072609 | 0.00286023  | -0.00001388 |             |
| 0.01499718                   | 0.12019041  | 0.99089495  | -0.05879015 | 0.00051367  |             |
| 0.00041659                   | 0.00426992  | 0.05870151  | 0.99805883  | -0.02035429 |             |
| 0.00000327                   | 0.00003874  | 0.00068430  | 0.02034924  | 0.99979270  |             |
| <i>J</i> = 9, <i>O</i> -     |             |             |             |             |             |
| 0.94036541                   | -0.33993363 | 0.01256988  | -0.00014164 | 0.00000040  |             |
| 0.33889075                   | 0.93300383  | -0.12103193 | 0.00286098  | -0.00001388 |             |
| 0.02941349                   | 0.11803007  | 0.99083157  | -0.05879021 | 0.00051367  |             |
| 0.00089444                   | 0.00422898  | 0.05869926  | 0.99805882  | -0.02035429 |             |
| 0.00000742                   | 0.00003855  | 0.00068428  | 0.02034924  | 0.99979270  |             |
| <i>J</i> = 9, <i>E</i> -     |             |             |             |             |             |
| 0.98524569                   | -0.17105285 | 0.00564321  | -0.00004790 |             |             |
| 0.17090852                   | 0.98160795  | -0.08505465 | 0.00135001  |             |             |
| 0.00900990                   | 0.08475378  | 0.99563750  | -0.03796811 |             |             |
| 0.00015866                   | 0.00188593  | 0.03794496  | 0.99927804  |             |             |
| <i>J</i> = 10, <i>E</i> +    |             |             |             |             |             |
| 0.83629344                   | -0.54541368 | 0.05600086  | -0.00104466 | 0.00000745  | -0.00000002 |
| 0.54269801                   | 0.80891192  | -0.22595055 | 0.00931214  | -0.00011767 | 0.00000037  |
| 0.07792184                   | 0.21890335  | 0.96625755  | -0.11112529 | 0.00264950  | -0.00001337 |
| 0.00450838                   | 0.01632611  | 0.11019518  | 0.99213497  | -0.05690434 | 0.00050272  |
| 0.00010790                   | 0.00044904  | 0.00368957  | 0.05684317  | 0.99817259  | -0.02016209 |
| 0.00000076                   | 0.00000347  | 0.00003201  | 0.00064595  | 0.02015799  | 0.99979660  |
| <i>J</i> = 10, <i>O</i> +    |             |             |             |             |             |
| 0.97092504                   | -0.23886778 | 0.01570588  | -0.00027286 | 0.00000149  |             |
| 0.23842192                   | 0.95906548  | -0.15272030 | 0.00499032  | -0.00004438 |             |
| 0.02142204                   | 0.15192216  | 0.98485971  | -0.08068732 | 0.00129213  |             |
| 0.00080638                   | 0.00743186  | 0.08048749  | 0.99603116  | -0.03725322 |             |
| 0.00001150                   | 0.00012357  | 0.00172025  | 0.03723573  | 0.99930502  |             |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

| KAPPA = -0.800000 --CONTINUED |             |              |             |             |             |             |
|-------------------------------|-------------|--------------|-------------|-------------|-------------|-------------|
| <i>J = 10, O-</i>             |             |              |             |             |             |             |
| 0.90862494                    | -0.41713098 | 0.02005900   | -0.00030795 | 0.00000160  |             |             |
| 0.41506694                    | 0.89674743  | -0.15342279  | 0.00499278  | -0.00004439 |             |             |
| 0.04600472                    | 0.14762131  | 0.98467221   | -0.08068757 | 0.00129213  |             |             |
| 0.00192603                    | 0.00733001  | 0.08047835   | 0.99603112  | -0.03725322 |             |             |
| 0.00002929                    | 0.00012288  | 0.00172011   | 0.03723573  | 0.99930502  |             |             |
| <i>J = 10, E-</i>             |             |              |             |             |             |             |
| 0.97776083                    | -0.20952207 | 0.00917898   | -0.00011717 | 0.00000037  |             |             |
| 0.20923026                    | 0.97153003  | -0.111110837 | 0.00264948  | -0.00001337 |             |             |
| 0.01436381                    | 0.11052704  | 0.99213865   | -0.05690433 | 0.00050272  |             |             |
| 0.00037821                    | 0.00369698  | 0.05684330   | 0.99817259  | -0.02016209 |             |             |
| 0.00000284                    | 0.00003205  | 0.00064595   | 0.02015799  | 0.99979660  |             |             |
| <i>J = 11, E+</i>             |             |              |             |             |             |             |
| 0.81288579                    | -0.57669381 | 0.08146927   | -0.00192482 | 0.00001874  | -0.00000007 |             |
| 0.57431911                    | 0.77045555  | -0.27631715  | 0.01430318  | -0.00024643 | 0.00000141  |             |
| 0.09657442                    | 0.27046661  | 0.94764264   | -0.13954897 | 0.00455031  | -0.00004185 |             |
| 0.00689885                    | 0.02587181  | 0.13764134   | 0.98707654  | -0.07756460 | 0.00124883  |             |
| 0.00022268                    | 0.00097981  | 0.00631410   | 0.07742825  | 0.99630182  | -0.03669692 |             |
| 0.00000284                    | 0.00001385  | 0.00009994   | 0.00160391  | 0.03668300  | 0.99932566  |             |
| <i>J = 11, O+</i>             |             |              |             |             |             |             |
| 0.96287679                    | -0.26898488 | 0.02269681   | -0.00052104 | 0.00000427  | -0.00000001 |             |
| 0.26838170                    | 0.94490011  | -0.18727309  | 0.00798893  | -0.00010603 | 0.00000035  |             |
| 0.02894141                    | 0.18619953  | 0.97649557   | -0.10460537 | 0.00250047  | -0.00001299 |             |
| 0.00139326                    | 0.01185603  | 0.10420645   | 0.99293464  | -0.05548937 | 0.00049417  |             |
| 0.00002933                    | 0.00029411  | 0.00332595   | 0.05544409  | 0.99825572  | -0.02000821 |             |
| 0.00000019                    | 0.00000211  | 0.00002781   | 0.00061742  | 0.02000477  | 0.99979969  |             |
| <i>J = 11, O-</i>             |             |              |             |             |             |             |
| 0.87002852                    | -0.49205719 | 0.03049149   | -0.00060256 | 0.00000466  | -0.00000001 |             |
| 0.48843021                    | 0.85191031  | -0.18873477  | 0.00799583  | -0.00010605 | 0.00000035  |             |
| 0.06688103                    | 0.17886396  | -0.97600507  | -0.10460621 | 0.00250047  | -0.00001299 |             |
| 0.00363613                    | 0.01166824  | 0.10417533   | 0.99293445  | -0.05548937 | 0.00049417  |             |
| 0.00008241                    | 0.00029333  | 0.00332524   | 0.05544408  | 0.99825572  | -0.02000821 |             |
| 0.00000056                    | 0.00000212  | 0.00002780   | 0.00061742  | 0.02000477  | 0.99979969  |             |
| <i>J = 11, E-</i>             |             |              |             |             |             |             |
| 0.96830083                    | -0.24939373 | 0.01400757   | -0.00024491 | 0.00000141  |             |             |
| 0.24886979                    | 0.95842666  | -0.13950431  | 0.00455020  | -0.00004185 |             |             |
| 0.02137156                    | 0.13849511  | 0.98708892   | -0.07756459 | 0.00124883  |             |             |
| 0.00076486                    | 0.00633997  | 0.07742886   | 0.99630183  | -0.03669692 |             |             |
| 0.00001043                    | 0.00010023  | 0.00160391   | 0.03668300  | 0.99932566  |             |             |
| <i>J = 12, E+</i>             |             |              |             |             |             |             |
| 0.79196912                    | -0.59985399 | 0.11379372   | -0.00333088 | 0.00004187  | -0.00000023 | 0.00000000  |
| 0.59945333                    | 0.72858357  | -0.33072919  | 0.02096818  | -0.00046578 | 0.00000396  | -0.00000001 |
| 0.11551068                    | 0.32833059  | 0.92186334   | -0.17021355 | 0.00718459  | -0.00009808 | 0.00000034  |
| 0.00988600                    | 0.03919765  | 0.16654959   | 0.98011784  | -0.09995174 | 0.00238973  | -0.00001269 |
| 0.00040652                    | 0.00193382  | 0.00991687   | 0.09968046  | 0.99348035  | -0.05438845 | 0.00048731  |
| 0.00000763                    | 0.00004075  | 0.00023347   | 0.00306713  | 0.05435295  | 0.99831908  | -0.01988222 |
| 0.00000004                    | 0.00000026  | 0.00000160   | 0.00002490  | 0.00059537  | 0.01987927  | 0.99980221  |
| <i>J = 12, O+</i>             |             |              |             |             |             |             |
| 0.95435523                    | -0.29701741 | 0.03139914   | -0.00091974 | 0.00001031  | -0.00000004 |             |
| 0.29631200                    | 0.92836913  | -0.22402023  | 0.01203541  | -0.00021710 | 0.00000131  |             |
| 0.03742166                    | 0.22269986  | 0.96538063   | -0.13048621 | 0.00424099  | -0.00003995 |             |
| 0.00221524                    | 0.01777171  | 0.12975950   | 0.98852516  | -0.07522142 | 0.00121523  |             |
| 0.00006261                    | 0.00059877  | 0.00563420   | 0.07512228  | 0.99649905  | -0.03625169 |             |
| 0.00000072                    | 0.00000778  | 0.00008548   | 0.00151779  | 0.03624020  | 0.99934195  |             |
| <i>J = 12, O-</i>             |             |              |             |             |             |             |
| 0.82723570                    | -0.56008038 | 0.04460798   | -0.00109244 | 0.00001143  | -0.00000005 |             |
| 0.55435315                    | 0.80068815  | -0.22681657  | 0.01205281  | -0.00021717 | 0.00000131  |             |
| 0.09129785                    | 0.21189694  | 0.96421942   | -0.13048871 | 0.00424099  | -0.00003995 |             |
| 0.00619231                    | 0.01754377  | 0.12966709   | 0.98852444  | -0.07522142 | 0.00121523  |             |
| 0.00019012                    | 0.00060312  | 0.00563135   | 0.07512224  | 0.99649905  | -0.03625169 |             |
| 0.00000232                    | 0.00000794  | 0.00008545   | 0.00151779  | 0.03624020  | 0.99934195  |             |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

|                                      |              |              |              |              |              |              |              |
|--------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <i>KAPPA</i> = -0.800000 --CONTINUED |              |              |              |              |              |              |              |
| <i>J</i> = 12, <i>E</i> --           |              |              |              |              |              |              |              |
| 0.95687465                           | --0.28978632 | 0.02036111   | --0.00046175 | 0.00000395   | --0.00000001 |              |              |
| 0.28893148                           | 0.94208834   | --0.17010745 | 0.00718426   | --0.00009808 | 0.00000034   |              |              |
| 0.03012612                           | 0.16850385   | 0.98015449   | --0.09995170 | 0.00238973   | --0.00001269 |              |              |
| 0.00138474                           | 0.00999262   | 0.09968278   | 0.99348036   | --0.05438845 | 0.00048731   |              |              |
| 0.00002793                           | 0.00023471   | 0.00306718   | 0.05435295   | 0.99831908   | --0.01988222 |              |              |
| 0.00000017                           | 0.00000161   | 0.00002490   | 0.00059537   | 0.01987927   | 0.99980221   |              |              |
| <i>J</i> = 13, <i>E</i> +            |              |              |              |              |              |              |              |
| 0.77330401                           | --0.61528388 | 0.15295950   | --0.00548168 | 0.00008573   | --0.00000063 | 0.00000000   |              |
| 0.61948223                           | 0.68192452   | --0.38773922 | 0.02963695   | --0.00081759 | 0.00000939   | --0.00000004 |              |
| 0.13439105                           | 0.39132567   | 0.88740980   | --0.20295993 | 0.01069342   | --0.00019744 | 0.00000124   |              |
| 0.01346353                           | 0.05706514   | 0.19634327   | 0.97088306   | --0.12402258 | 0.00401248   | --0.00003849 |              |
| 0.00067874                           | 0.00353269   | 0.01465084   | 0.12352519   | 0.98950757   | --0.07339824 | 0.00118840   |              |
| 0.00001705                           | 0.00010109   | 0.00046783   | 0.00514506   | 0.07332149   | 0.99664907   | --0.03588728 |              |
| 0.00000018                           | 0.00000117   | 0.00000582   | 0.00007551   | 0.00145152   | 0.03587754   | 0.99935514   |              |
| <i>J</i> = 13, <i>O</i> +            |              |              |              |              |              |              |              |
| 0.94555816                           | --0.32274447 | 0.04187400   | --0.00152755 | 0.00002216   | --0.00000013 | 0.00000000   |              |
| 0.32206715                           | 0.90943591   | --0.26248617 | 0.01731865   | --0.00040205 | 0.00000360   | --0.00000001 |              |
| 0.04670742                           | 0.26099110   | 0.95111489   | --0.15823613 | 0.00662178   | --0.00009221 | 0.00000033   |              |
| 0.00330369                           | 0.02539247   | 0.15700592   | 0.98253948   | --0.09645880 | 0.00230424   | --0.00001244 |              |
| 0.00011853                           | 0.00109950   | 0.00878331   | 0.09626497   | 0.99387696   | --0.05350744 | 0.00048168   |              |
| 0.00000201                           | 0.00002110   | 0.00019714   | 0.00287647   | 0.05347848   | 0.99836897   | --0.01977717 |              |
| 0.00000001                           | 0.00000013   | 0.00000130   | 0.00002280   | 0.00057783   | 0.01977458   | 0.99980430   |              |
| <i>J</i> = 13, <i>O</i> -            |              |              |              |              |              |              |              |
| 0.78333406                           | --0.61837234 | 0.06324486   | --0.00186806 | 0.00002499   | --0.00000015 | 0.00000000   |              |
| 0.61018132                           | 0.74555157   | --0.26745116 | 0.01735893   | --0.00040223 | 0.00000360   | --0.00000001 |              |
| 0.11820361                           | 0.24723293   | 0.94858797   | --0.15824281 | 0.00662179   | --0.00009221 | 0.00000033   |              |
| 0.00970888                           | 0.02539247   | 0.15676037   | 0.98253712   | --0.09645880 | 0.00230424   | --0.00001244 |              |
| 0.00038162                           | 0.00113012   | 0.00877359   | 0.09626483   | 0.99387696   | --0.05350744 | 0.00048168   |              |
| 0.00000688                           | 0.00002209   | 0.00019698   | 0.00287647   | 0.05347848   | 0.99836897   | --0.01977717 |              |
| 0.00000004                           | 0.00000013   | 0.00000130   | 0.00002280   | 0.00057783   | 0.01977458   | 0.99980430   |              |
| <i>J</i> = 13, <i>E</i> -            |              |              |              |              |              |              |              |
| 0.94361453                           | --0.32981907 | 0.02846648   | --0.00080794 | 0.00000935   | --0.00000004 |              |              |
| 0.32853463                           | 0.92241612   | --0.20272919 | 0.01069249   | --0.00019744 | 0.00000124   | --0.00000001 |              |
| 0.04063585                           | 0.20036810   | 0.97098078   | --0.12402246 | 0.00401248   | --0.00003849 |              |              |
| 0.00230892                           | 0.01484185   | 0.12353289   | 0.98950761   | --0.07339824 | 0.00118840   |              |              |
| 0.00006265                           | 0.00047197   | 0.00514529   | 0.07332149   | 0.99664907   | --0.03588728 |              |              |
| 0.00000070                           | 0.00000586   | 0.00007552   | 0.00145152   | 0.03587754   | 0.99935514   |              |              |
| <i>J</i> = 14, <i>E</i> +            |              |              |              |              |              |              |              |
| 0.75659186                           | --0.62314741 | 0.19794220   | --0.00865596 | 0.00016399   | --0.00000155 | 0.00000001   | --0.00000000 |
| 0.63549948                           | 0.62968606   | --0.44494907 | 0.04067381   | --0.00135610 | 0.00001992   | --0.00000013 | 0.00000000   |
| 0.15296415                           | 0.45690054   | 0.84330651   | --0.23758374 | 0.01522570   | --0.00036009 | 0.00000334   | --0.00000001 |
| 0.01760745                           | 0.07992581   | 0.22637517   | 0.95896087   | --0.14970510 | 0.00620819   | --0.00008771 | 0.00000032   |
| 0.00105827                           | 0.00603960   | 0.02066139   | 0.14884719   | 0.98416856   | --0.09374048 | 0.00223626   | --0.00001225 |
| 0.00003365                           | 0.00022207   | 0.00084839   | 0.00795044   | 0.09359217   | 0.99417800   | --0.05278641 | 0.00047698   |
| 0.00000052                           | 0.00000379   | 0.00001559   | 0.00017198   | 0.00273028   | 0.05276210   | 0.99840926   | --0.01968824 |
| 0.00000000                           | 0.00000002   | 0.00000009   | 0.00000110   | 0.00002122   | 0.00056355   | 0.01968594   | 0.99980605   |
| <i>J</i> = 14, <i>O</i> +            |              |              |              |              |              |              |              |
| 0.93664839                           | --0.34605910 | 0.05410232   | --0.00241529 | 0.00004377   | --0.00000036 | 0.00000000   |              |
| 0.34562993                           | 0.88809151   | --0.30208497 | 0.02403349   | --0.00069258 | 0.00000835   | --0.00000004 |              |
| 0.05663727                           | 0.30052496   | 0.93334905   | --0.18772658 | 0.00975736   | --0.00018305 | 0.00000119   |              |
| 0.00468195                           | 0.03489717   | 0.18576905   | 0.97469705   | --0.11916819 | 0.00383689   | --0.00003732 |              |
| 0.00020536                           | 0.00187135   | 0.01291738   | 0.11881932   | 0.99021965   | --0.07193919 | 0.00116648   |              |
| 0.00000464                           | 0.00004834   | 0.00039099   | 0.00478644   | 0.07187724   | 0.99676698   | --0.03558352 |              |
| 0.00000005                           | 0.00000052   | 0.00000466   | 0.00006836   | 0.00139900   | 0.03557509   | 0.99936602   |              |
| <i>J</i> = 14, <i>O</i> -            |              |              |              |              |              |              |              |
| 0.74082328                           | --0.66599495 | 0.08730579   | --0.00304872 | 0.00005028   | --0.00000039 | 0.00000000   |              |
| 0.65536125                           | 0.68820556   | --0.31031027 | 0.02412046   | --0.00069307 | 0.00000835   | --0.00000004 |              |
| 0.14655753                           | 0.28556794   | 0.92823986   | --0.18774282 | 0.00975741   | --0.00018306 | 0.00000119   |              |
| 0.01424454                           | 0.03564888   | 0.18517490   | 0.97469007   | --0.11916820 | 0.00383689   | --0.00003732 |              |
| 0.00068999                           | 0.00198793   | 0.01288828   | 0.11881877   | 0.99021965   | --0.07193919 | 0.00116648   |              |
| 0.00001668                           | 0.00005265   | 0.00039033   | 0.00478642   | 0.07187724   | 0.99676698   | --0.03558352 |              |
| 0.00000017                           | 0.00000057   | 0.00000466   | 0.00006836   | 0.00139900   | 0.03557509   | 0.99936602   |              |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

|                               |             |             |             |             |             |             |             |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| KAPPA = -0.800000 --CONTINUED |             |             |             |             |             |             |             |
| J = 14, E-                    |             |             |             |             |             |             |             |
| 0.92875734                    | -0.36867768 | 0.03853290  | -0.00133475 | 0.00001980  | -0.00000013 | 0.00000000  |             |
| 0.36688723                    | 0.89940889  | -0.23711922 | 0.01522332  | -0.00036009 | 0.00000334  | -0.00000001 |             |
| 0.05282546                    | 0.23387021  | 0.95919974  | -0.14970472 | 0.00620819  | -0.00008771 | 0.00000032  |             |
| 0.00360809                    | 0.02108064  | 0.14887006  | 0.98416869  | -0.09374048 | 0.00223626  | -0.00001225 |             |
| 0.00012462                    | 0.00085954  | 0.00795133  | 0.09359218  | 0.99417800  | -0.05278641 | 0.00047698  |             |
| 0.00000204                    | 0.00001572  | 0.00017199  | 0.00273028  | 0.05276210  | 0.99840926  | -0.01968824 |             |
| 0.00000001                    | 0.00000009  | 0.00000110  | 0.00002122  | 0.00056355  | 0.01968594  | 0.99980605  |             |
| J = 15, E+                    |             |             |             |             |             |             |             |
| 0.74154403                    | 0.62381006  | 0.24657473  | -0.01320107 | 0.00029688  | -0.00000346 | 0.00000002  | -0.00000000 |
| 0.64834871                    | -0.57223162 | -0.49922168 | 0.05447954  | -0.00215008 | 0.00003895  | -0.00000033 | 0.00000000  |
| 0.17104835                    | -0.52127425 | 0.78968024  | -0.27382845 | 0.02093651  | -0.00061183 | 0.00000761  | -0.00000004 |
| 0.02228036                    | -0.10765928 | 0.25610939  | 0.94389869  | -0.17690101 | 0.00907276  | -0.00017213 | 0.00000114  |
| 0.00156271                    | -0.00971715 | 0.02810085  | 0.17548875  | 0.97723533  | -0.11538894 | 0.00369781  | -0.00003636 |
| 0.00006061                    | -0.00044234 | 0.00143309  | 0.01159934  | 0.11512483  | 0.99075895  | -0.07074567 | 0.00114824  |
| 0.00000125                    | -0.00001016 | 0.00003547  | 0.00033717  | 0.00451221  | 0.07069349  | 0.99686208  | -0.03532641 |
| 0.00000001                    | -0.00000010 | 0.00000037  | 0.00000389  | 0.00006299  | 0.00135636  | 0.03531900  | 0.99937517  |
| J = 15, O+                    |             |             |             |             |             |             |             |
| 0.92775163                    | -0.36693676 | 0.06797712  | -0.00366580 | 0.00008090  | -0.00000085 | 0.00000000  | -0.00000000 |
| 0.36706938                    | 0.86438073  | -0.34213531 | 0.03237577  | -0.00112879 | 0.00001736  | -0.00000012 | 0.00000000  |
| 0.06705497                    | 0.34064720  | 0.91181361  | -0.21879074 | 0.01376788  | -0.00032968 | 0.00000314  | -0.00000001 |
| 0.00636501                    | -0.04640959 | 0.21584089  | -0.96470263 | -0.14329152 | 0.00589168  | -0.00008415 | 0.00000032  |
| 0.00033213                    | 0.00300044  | 0.01818486  | 0.14270204  | 0.98534637  | -0.09156473 | 0.00218093  | -0.00001208 |
| 0.00000948                    | 0.00009876  | 0.00070332  | 0.000734304 | 0.09144616  | 0.99441422  | -0.05218542 | 0.00047300  |
| 0.00000013                    | 0.00000155  | 0.00001232  | 0.00015407  | 0.00261477  | 0.05216455  | 0.99844247  | -0.01961198 |
| 0.00000000                    | 0.00000001  | 0.00000007  | 0.00000096  | 0.00001998  | 0.00055169  | 0.01960991  | 0.99980755  |
| J = 15, O-                    |             |             |             |             |             |             |             |
| 0.70119992                    | 0.70316822  | 0.11768680  | -0.00478867 | 0.00009481  | -0.00000095 | 0.00000000  | -0.00000000 |
| 0.69074016                    | -0.62919065 | -0.35487489 | 0.03255293  | -0.00113000 | 0.00001737  | -0.00000012 | 0.00000000  |
| 0.17550728                    | -0.32749715 | 0.90214622  | -0.21882719 | 0.01376801  | -0.00032968 | 0.00000314  | -0.00000001 |
| 0.01981328                    | -0.04907179 | 0.21451686  | 0.96468374  | -0.14329154 | 0.00589168  | -0.00008415 | 0.00000032  |
| 0.00115037                    | -0.00333878 | 0.01810672  | 0.14270026  | 0.98534636  | -0.09156473 | 0.00218093  | -0.00001208 |
| 0.00003530                    | -0.00011351 | 0.00070104  | 0.000734297 | 0.09144615  | 0.99441422  | -0.05218542 | 0.00047300  |
| 0.00000053                    | -0.00000182 | 0.00001229  | 0.00015407  | 0.00261477  | 0.05216455  | 0.99844247  | -0.01961198 |
| 0.00000000                    | -0.00000001 | 0.00000007  | 0.00000096  | 0.00001998  | 0.00055169  | 0.01960991  | 0.99980755  |
| J = 15, E-                    |             |             |             |             |             |             |             |
| 0.91261057                    | -0.40566402 | 0.05073672  | -0.00210581 | 0.00003863  | -0.00000033 | 0.00000000  |             |
| 0.40334189                    | 0.87313899  | -0.27295631 | 0.02093084  | -0.00061181 | 0.00000761  | -0.00000004 |             |
| 0.06654784                    | 0.26875181  | 0.94444052  | -0.17690000 | 0.00907276  | -0.00017213 | 0.00000114  |             |
| 0.00534744                    | 0.02890240  | 0.17555060  | 0.97723577  | -0.11538894 | 0.00369781  | -0.00003636 |             |
| 0.00022652                    | 0.00145750  | 0.01160233  | 0.11512486  | 0.99075895  | -0.07074567 | 0.00114824  |             |
| 0.00000495                    | 0.00003581  | 0.00033724  | 0.00451221  | 0.07069349  | 0.99686208  | -0.03532641 |             |
| 0.00000005                    | 0.00000037  | 0.00000389  | 0.00006299  | 0.00135636  | 0.03531900  | 0.99937517  |             |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

|                     |             |             |             |
|---------------------|-------------|-------------|-------------|
| $KAPPA = -0.900000$ |             |             |             |
| $J = 2, E+$         |             |             |             |
| 0.99975379          | -0.02218938 |             |             |
| 0.02218938          | 0.99975379  |             |             |
| $J = 3, E+$         |             |             |             |
| 0.99877555          | -0.04947116 |             |             |
| 0.04947116          | 0.99877555  |             |             |
| $J = 3, O+$         |             |             |             |
| 0.99992586          | -0.01217648 |             |             |
| 0.01217648          | 0.99992586  |             |             |
| $J = 3, O-$         |             |             |             |
| 0.99991994          | -0.01265377 |             |             |
| 0.01265377          | 0.99991994  |             |             |
| $J = 4, E+$         |             |             |             |
| 0.99637300          | -0.08509286 | 0.00024318  |             |
| 0.08509016          | 0.99630905  | -0.01131143 |             |
| 0.00072024          | 0.01129110  | 0.99993599  |             |
| $J = 4, O+$         |             |             |             |
| 0.99969670          | -0.02462743 |             |             |
| 0.02462743          | 0.99969670  |             |             |
| $J = 4, O-$         |             |             |             |
| 0.99965528          | -0.02625511 |             |             |
| 0.02625511          | 0.99965528  |             |             |
| $J = 4, E-$         |             |             |             |
| 0.99993610          | -0.01130446 |             |             |
| 0.01130446          | 0.99993610  |             |             |
| $J = 5, E+$         |             |             |             |
| 0.99173973          | -0.12826449 | 0.00072954  |             |
| 0.12824893          | 0.99149303  | -0.02222127 |             |
| 0.00212687          | 0.02213128  | 0.99975281  |             |
| $J = 5, O+$         |             |             |             |
| 0.99921755          | -0.03955092 | 0.00014652  |             |
| 0.03955021          | 0.99915974  | -0.01075151 |             |
| 0.00027883          | 0.01074889  | 0.99994219  |             |
| $J = 5, O-$         |             |             |             |
| 0.99905231          | -0.04352529 | 0.00015130  |             |
| 0.04352440          | 0.99899451  | -0.01075161 |             |
| 0.00031682          | 0.01074800  | 0.99994219  |             |
| $J = 5, E-$         |             |             |             |
| 0.99975379          | -0.02218938 |             |             |
| 0.02218938          | 0.99975379  |             |             |
| $J = 6, E+$         |             |             |             |
| 0.98413040          | -0.17743925 | 0.00163135  | -0.00000283 |
| 0.17738626          | 0.98351336  | -0.03515075 | 0.00013721  |
| 0.00463264          | 0.03488182  | 0.99932642  | -0.01041663 |
| 0.00002671          | 0.00022792  | 0.01041501  | 0.99994574  |
| $J = 6, O+$         |             |             |             |
| 0.99838916          | -0.05673549 | 0.00040800  |             |
| 0.05673185          | 0.99817722  | -0.02058463 |             |
| 0.00076062          | 0.02057461  | 0.99978803  |             |
| $J = 6, O-$         |             |             |             |
| 0.99789591          | -0.06483488 | 0.00042674  |             |
| 0.06482992          | 0.99768398  | -0.02058520 |             |
| 0.00090889          | 0.02056955  | 0.99978801  |             |



TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| <i>KAPPA</i> = -0.900000—CONTINUED |             |             |             |             |
|------------------------------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 6, <i>E</i> —           |             |             |             |             |
| 0.99938555                         | -0.03505012 | 0.00013714  |             |             |
| 0.03504965                         | 0.99933128  | -0.01041663 |             |             |
| 0.00022806                         | 0.01041563  | 0.99994574  |             |             |
| <i>J</i> = 7, <i>E</i> +           |             |             |             |             |
| 0.97309307                         | -0.23039122 | 0.00312402  | -0.00001021 |             |
| 0.23025443                         | 0.97183454  | -0.05020350 | 0.00036876  |             |
| 0.00853024                         | 0.04956954  | 0.99854168  | -0.01961138 |             |
| 0.00009233                         | 0.00061152  | 0.01960510  | 0.99980761  |             |
| <i>J</i> = 7, <i>O</i> +           |             |             |             |             |
| 0.99711844                         | -0.07585567 | 0.00085875  | -0.00000178 |             |
| 0.07584443                         | 0.99660986  | -0.03188104 | 0.00013004  |             |
| 0.00156252                         | 0.03185397  | 0.99943934  | -0.01019283 |             |
| 0.00000784                         | 0.00019495  | 0.01019180  | 0.99994804  |             |
| <i>J</i> = 7, <i>O</i> —           |             |             |             |             |
| 0.99589518                         | -0.09050946 | 0.00091174  | -0.00000183 |             |
| 0.09049243                         | 0.99538664  | -0.03188323 | 0.00013004  |             |
| 0.00197820                         | 0.03183453  | 0.99943922  | -0.01019283 |             |
| 0.00001022                         | 0.00019488  | 0.01019180  | 0.99994804  |             |
| <i>J</i> = 7, <i>E</i> —           |             |             |             |             |
| 0.99875185                         | -0.04994596 | 0.00036844  |             |             |
| 0.04994357                         | 0.99855948  | -0.01961137 |             |             |
| 0.00061160                         | 0.01960530  | 0.99980761  |             |             |
| <i>J</i> = 8, <i>E</i> +           |             |             |             |             |
| 0.95866195                         | -0.28449601 | 0.00541162  | -0.00002701 | 0.00000003  |
| 0.28420252                         | 0.95639040  | -0.06742223 | 0.00075582  | -0.00000168 |
| 0.01400511                         | 0.06616533  | 0.99726074  | -0.02995010 | 0.00012525  |
| 0.00023065                         | 0.00125168  | 0.02993235  | 0.99950076  | -0.01003271 |
| 0.00000101                         | 0.00000589  | 0.00017529  | 0.01003196  | 0.99994966  |
| <i>J</i> = 8, <i>O</i> +           |             |             |             |             |
| 0.99532812                         | -0.09653751 | 0.00156227  | -0.00000605 |             |
| 0.09651057                         | 0.99432659  | -0.04472389 | 0.00033953  |             |
| 0.00276414                         | 0.04466411  | 0.99881827  | -0.01896170 |             |
| 0.00002567                         | 0.00050881  | 0.01895789  | 0.99982015  |             |
| <i>J</i> = 8, <i>O</i> —           |             |             |             |             |
| 0.99266984                         | -0.12084590 | 0.00168738  | -0.00000628 |             |
| 0.12080004                         | 0.99166850  | -0.04473066 | 0.00033953  |             |
| 0.00373218                         | 0.04460499  | 0.99881776  | -0.01896170 |             |
| 0.00003600                         | 0.00050841  | 0.01895789  | 0.99982015  |             |
| <i>J</i> = 8, <i>E</i> —           |             |             |             |             |
| 0.99776277                         | -0.06684967 | 0.00075474  | -0.00000168 |             |
| 0.06684225                         | 0.99731394  | -0.02995006 | 0.00012525  |             |
| 0.00124945                         | 0.02993325  | 0.99950077  | -0.01003271 |             |
| 0.00000584                         | 0.00017529  | 0.01003196  | 0.99994966  |             |
| <i>J</i> = 9, <i>E</i> +           |             |             |             |             |
| 0.94139152                         | -0.33720297 | 0.00872737  | -0.00000640 | 0.00000014  |
| 0.33665503                         | 0.93761391  | -0.08684315 | 0.00134842  | -0.00000554 |
| 0.02109918                         | 0.08467191  | 0.99531985  | -0.04151843 | 0.00032024  |
| 0.00047933                         | 0.00223273  | 0.04147636  | 0.99896564  | -0.01849727 |
| 0.00000384                         | 0.00001943  | 0.00044805  | 0.01849460  | 0.99982886  |
| <i>J</i> = 9, <i>O</i> +           |             |             |             |             |
| 0.99296449                         | -0.11838424 | 0.00258712  | -0.00001522 | 0.00000002  |
| 0.11832941                         | 0.99121242  | -0.05912387 | 0.00067893  | -0.00000160 |
| 0.00443499                         | 0.05900915  | 0.99783604  | -0.02866134 | 0.00012181  |
| 0.00006191                         | 0.00101694  | 0.02865107  | 0.99953980  | -0.00991247 |
| 0.00000024                         | 0.00000448  | 0.00016237  | 0.00991189  | 0.99995086  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.900000—CONTINUED |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|
| <i>J</i> = 9, <i>O</i> —    |             |             |             |             |             |
| 0.98774319                  | -0.15606174 | 0.00284889  | -0.00001597 | 0.00000002  |             |
| 0.15595560                  | 0.98599171  | -0.05914170 | 0.00067895  | -0.00000160 |             |
| 0.00642072                  | 0.05885620  | 0.99783427  | -0.02866134 | 0.00012181  |             |
| 0.00009395                  | 0.00101539  | 0.02865104  | 0.99953980  | -0.00991247 |             |
| 0.00000038                  | 0.00000448  | 0.00016237  | 0.00991189  | 0.99995086  |             |
| <i>J</i> = 9, <i>E</i> —    |             |             |             |             |             |
| 0.99632046                  | -0.08569551 | 0.00134537  | -0.00000554 |             |             |
| 0.08567735                  | 0.99545744  | -0.04151827 | 0.00032024  |             |             |
| 0.00221869                  | 0.04147958  | 0.99896565  | -0.01849727 |             |             |
| 0.00001912                  | 0.00044808  | 0.01849460  | 0.99982886  |             |             |
| <i>J</i> = 10, <i>E</i> +   |             |             |             |             |             |
| 0.92219646                  | -0.38649178 | 0.01333341  | -0.00012077 | 0.00000042  | -0.00000000 |
| 0.38557734                  | 0.91627054  | -0.10850604 | 0.00220242  | -0.00001357 | 0.00000002  |
| 0.02971594                  | 0.10516197  | 0.99252486  | -0.05433171 | 0.00062883  | -0.00000154 |
| 0.00087804                  | 0.00365443  | 0.05424291  | 0.99813528  | -0.02774038 | 0.00011921  |
| 0.00001052                  | 0.00004787  | 0.00087946  | 0.02773336  | 0.99956674  | -0.00981885 |
| 0.00000004                  | 0.00000018  | 0.00000370  | 0.00015325  | 0.00981838  | 0.99995179  |
| <i>J</i> = 10, <i>O</i> +   |             |             |             |             |             |
| 0.99000193                  | -0.14099694 | 0.00400575  | -0.00003259 | 0.00000009  |             |
| 0.14089785                  | 0.98717313  | -0.07507065 | 0.00118564  | -0.00000513 |             |
| 0.00663053                  | 0.07487273  | 0.99639318  | -0.03937832 | 0.00030650  |             |
| 0.00012641                  | 0.00177475  | 0.03935505  | 0.99905888  | -0.01814873 |             |
| 0.00000090                  | 0.00001434  | 0.00040853  | 0.01814671  | 0.99983525  |             |
| <i>J</i> = 10, <i>O</i> —   |             |             |             |             |             |
| 0.98055159                  | -0.19620975 | 0.00450722  | -0.00003456 | 0.00000009  |             |
| 0.19598932                  | 0.97772435  | -0.07511246 | 0.00118571  | -0.00000513 |             |
| 0.01033079                  | 0.07452316  | 0.99638789  | -0.03937832 | 0.00030650  |             |
| 0.00020848                  | 0.00176993  | 0.03935493  | 0.99905888  | -0.01814873 |             |
| 0.00000154                  | 0.00001431  | 0.00040853  | 0.01814671  | 0.99983525  |             |
| <i>J</i> = 10, <i>E</i> —   |             |             |             |             |             |
| 0.99432270                  | -0.10638399 | 0.00219495  | -0.00001356 | 0.00000002  |             |
| 0.10634568                  | 0.99284355  | -0.05433123 | 0.00062883  | -0.00000154 |             |
| 0.00360083                  | 0.05425269  | 0.99813533  | -0.02774038 | 0.00011921  |             |
| 0.00004652                  | 0.00087956  | 0.02773336  | 0.99956674  | -0.00981885 |             |
| 0.00000017                  | 0.00000370  | 0.00015325  | 0.00981838  | 0.99995179  |             |
| <i>J</i> = 11, <i>E</i> +   |             |             |             |             |             |
| 0.90208971                  | -0.43110682 | 0.01951969  | -0.00022265 | 0.00000105  | -0.00000000 |
| 0.42971974                  | 0.89318819  | -0.13245518 | 0.00337990  | -0.00002843 | 0.00000008  |
| 0.03966051                  | 0.12778878  | 0.98864506  | -0.06838743 | 0.00108080  | -0.00000483 |
| 0.00146431                  | 0.00563772  | 0.06821482  | 0.99693538  | -0.03784922 | 0.00029623  |
| 0.00002384                  | 0.00010119  | 0.00151068  | 0.03783361  | 0.99912298  | -0.01787750 |
| 0.00000015                  | 0.00000068  | 0.00001159  | 0.00038077  | 0.01787590  | 0.99984014  |
| <i>J</i> = 11, <i>O</i> +   |             |             |             |             |             |
| 0.98644387                  | -0.16399320 | 0.00589281  | -0.00006271 | 0.00000025  | -0.00000000 |
| 0.16383007                  | 0.98213661  | -0.09254065 | 0.00190054  | -0.00001225 | 0.00000002  |
| 0.00938899                  | 0.09222703  | 0.99437992  | -0.05112965 | 0.00059345  | -0.00000150 |
| 0.00023087                  | 0.00284250  | 0.05108277  | 0.99832396  | -0.02704940 | 0.00011718  |
| 0.00000244                  | 0.00003424  | 0.00079081  | 0.02704418  | 0.99958644  | -0.00974389 |
| 0.00000001                  | 0.00000012  | 0.00000321  | 0.00014646  | 0.00974350  | 0.99995252  |
| <i>J</i> = 11, <i>O</i> —   |             |             |             |             |             |
| 0.97048472                  | -0.24106697 | 0.00679041  | -0.00006729 | 0.00000026  | -0.00000000 |
| 0.24064616                  | 0.96618086  | -0.09263019 | 0.00190073  | -0.00001225 | 0.00000002  |
| 0.01576877                  | 0.09150543  | 0.99436588  | -0.05112966 | 0.00059345  | -0.00000150 |
| 0.00041473                  | 0.00282979  | 0.05108234  | 0.99832396  | -0.02704940 | 0.00011718  |
| 0.00000456                  | 0.00003415  | 0.00079080  | 0.02704418  | 0.99958644  | -0.00974389 |
| 0.00000001                  | 0.00000012  | 0.00000321  | 0.00014646  | 0.00974350  | 0.99995252  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| <i>KAPPA</i> = -0.900000 —CONTINUED |             |             |             |             |             |             |  |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| <i>J</i> = 11, <i>E</i> —           |             |             |             |             |             |             |  |
| 0.99166743                          | -0.12878041 | 0.00336334  | -0.00002838 | 0.00000008  |             |             |  |
| 0.12870770                          | 0.98932123  | -0.06838615 | 0.00108080  | -0.00000483 |             |             |  |
| 0.00547965                          | 0.06824095  | 0.99693555  | -0.03784922 | 0.00029623  |             |             |  |
| 0.00009651                          | 0.00151107  | 0.03783361  | 0.99912298  | -0.01787750 |             |             |  |
| 0.00000065                          | 0.00001159  | 0.00038078  | 0.01787590  | 0.99984014  |             |             |  |
| <i>J</i> = 12, <i>E</i> +           |             |             |             |             |             |             |  |
| 0.88195662                          | -0.47052159 | 0.02760101  | -0.00038556 | 0.00000236  | -0.00000001 | 0.00000000  |  |
| 0.46859129                          | 0.86902288  | -0.15873539 | 0.00494933  | -0.00005372 | 0.00000022  | -0.00000000 |  |
| 0.05069091                          | 0.15277182  | 0.98340576  | -0.08367431 | 0.00170833  | -0.00001133 | 0.00000002  |  |
| 0.00227076                          | 0.00833040  | 0.08335870  | 0.99528434  | -0.04884190 | 0.00056715  | -0.00000146 |  |
| 0.00004747                          | 0.00019393  | 0.00238580  | 0.04881097  | 0.99845324  | -0.02651179 | 0.00011555  |  |
| 0.00000045                          | 0.00000195  | 0.00002717  | 0.00072890  | 0.02650770  | 0.99960145  | -0.00968253 |  |
| 0.00000000                          | 0.00000001  | 0.00000009  | 0.00000288  | 0.00014122  | 0.00968218  | 0.99995312  |  |
| <i>J</i> = 12, <i>O</i> +           |             |             |             |             |             |             |  |
| 0.98232033                          | -0.18702269 | 0.00832318  | -0.00011166 | 0.00000060  | -0.00000000 |             |  |
| 0.18677412                          | 0.97605098  | -0.11149750 | 0.00286830  | -0.00002511 | 0.00000007  |             |  |
| 0.01272997                          | 0.11103438  | 0.99167693  | -0.06391531 | 0.00100729  | -0.00000461 |             |  |
| 0.00038845                          | 0.00428541  | 0.06382868  | 0.99727642  | -0.03670205 | 0.00028826  |             |  |
| 0.00000554                          | 0.00007011  | 0.00134187  | 0.03669065  | 0.99916971  | -0.01766043 |             |  |
| 0.00000003                          | 0.00000044  | 0.00000988  | 0.00036026  | 0.01765911  | 0.99984400  |             |  |
| <i>J</i> = 12, <i>O</i> --          |             |             |             |             |             |             |  |
| 0.95696957                          | -0.29002120 | 0.00984499  | -0.00012137 | 0.00000063  | -0.00000000 |             |  |
| 0.28927220                          | 0.95070601  | -0.11167560 | 0.00286878  | -0.00002511 | 0.00000007  |             |  |
| 0.02302722                          | 0.10967068  | 0.99164303  | -0.06391534 | 0.00100729  | -0.00000461 |             |  |
| 0.00075974                          | 0.00425611  | 0.06382737  | 0.99727642  | -0.03670205 | 0.00028826  |             |  |
| 0.00001136                          | 0.00006984  | 0.00134185  | 0.03669065  | 0.99916971  | -0.01766043 |             |  |
| 0.00000007                          | 0.00000044  | 0.00000988  | 0.00036026  | 0.01765911  | 0.99984400  |             |  |
| <i>J</i> = 12, <i>E</i> --          |             |             |             |             |             |             |  |
| 0.98825832                          | -0.15271323 | 0.00491536  | -0.00005361 | 0.00000022  | -0.00000000 |             |  |
| 0.15258587                          | 0.98474046  | -0.08367119 | 0.00170832  | -0.00001133 | 0.00000002  |             |  |
| 0.00793802                          | 0.08342186  | 0.99528485  | -0.04884190 | 0.00056715  | -0.00000146 |             |  |
| 0.00018025                          | 0.00238701  | 0.04881098  | 0.99845324  | -0.02651179 | 0.00011555  |             |  |
| 0.00000179                          | 0.00002718  | 0.00072890  | 0.02650770  | 0.99960145  | -0.00968253 |             |  |
| 0.00000001                          | 0.00000009  | 0.00000288  | 0.00014122  | 0.00968218  | 0.99995312  |             |  |
| <i>J</i> = 13, <i>E</i> +           |             |             |             |             |             |             |  |
| 0.86244142                          | -0.50473475 | 0.03791070  | -0.00063505 | 0.00000483  | -0.00000002 | 0.00000000  |  |
| 0.50226489                          | 0.84413807  | -0.18738219 | 0.00698566  | -0.00009428 | 0.00000053  | -0.00000000 |  |
| 0.06255972                          | 0.18036555  | 0.97647999  | -0.10017435 | 0.00254624  | -0.00002283 | 0.00000007  |  |
| 0.00332366                          | 0.01191184  | 0.09962385  | 0.99309330  | -0.06072012 | 0.00095297  | -0.00000445 |  |
| 0.00008589                          | 0.00034675  | 0.00355185  | 0.06066373  | 0.99750928  | -0.03580959 | 0.00028190  |  |
| 0.00000109                          | 0.00000473  | 0.00005468  | 0.00122449  | 0.03580075  | 0.99920526  | -0.01748276 |  |
| 0.00000001                          | 0.00000003  | 0.00000033  | 0.00000873  | 0.00034448  | 0.01748164  | 0.99984713  |  |
| <i>J</i> = 13, <i>O</i> +           |             |             |             |             |             |             |  |
| 0.97768284                          | -0.20977836 | 0.01136970  | -0.00018729 | 0.00000129  | -0.00000000 | 0.00000000  |  |
| 0.20942423                          | 0.96888044  | -0.13189033 | 0.00413728  | -0.00004653 | 0.00000020  | -0.00000000 |  |
| 0.01665472                          | 0.13124634  | 0.98815634  | -0.07772759 | 0.00157437  | -0.00001066 | 0.00000002  |  |
| 0.00061321                          | 0.00617314  | 0.07757780  | 0.99585244  | -0.04712559 | 0.00054685  | -0.00000144 |  |
| 0.00001118                          | 0.00012980  | 0.00209647  | 0.04710330  | 0.99854725  | -0.02608158 | 0.00011422  |  |
| 0.00000009                          | 0.00000121  | 0.00002282  | 0.00068335  | 0.02607825  | 0.99961327  | -0.00963135 |  |
| 0.00000000                          | 0.00000000  | 0.00000007  | 0.00000263  | 0.00013705  | 0.00963106  | 0.99995361  |  |
| <i>J</i> = 13, <i>O</i> --          |             |             |             |             |             |             |  |
| 0.93959806                          | -0.34199994 | 0.01383754  | -0.00020645 | 0.00000137  | -0.00000000 | 0.00000000  |  |
| 0.34074636                          | 0.93080169  | -0.13222330 | 0.00413837  | -0.00004654 | 0.00000020  | -0.00000000 |  |
| 0.03233730                          | 0.12886763  | 0.98808065  | -0.07772768 | 0.00157437  | -0.00001066 | 0.00000002  |  |
| 0.00130157                          | 0.00611324  | 0.07757425  | 0.99585242  | -0.04712559 | 0.00054685  | -0.00000144 |  |
| 0.00002503                          | 0.00012915  | 0.00209641  | 0.04710330  | 0.99854725  | -0.02608158 | 0.00011422  |  |
| 0.00000022                          | 0.00000121  | 0.00002282  | 0.00068335  | 0.02607825  | 0.99961327  | -0.00963135 |  |
| 0.00000000                          | 0.00000000  | 0.00000007  | 0.00000263  | 0.00013705  | 0.00963106  | 0.99995361  |  |

TABLE I.—TRANSFORMATION COEFFICIENTS—CONTINUED

| KAPPA = -0.900000—CONTINUED |             |             |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>J = 13, E-</i>           |             |             |             |             |             |             |             |
| 0.98401083                  | -0.17797409 | 0.00692026  | -0.00009402 | 0.00000053  | -0.00000000 |             |             |
| 0.17776498                  | 0.97895844  | -0.10016735 | 0.00254623  | -0.00002283 | 0.00000007  |             |             |
| 0.01105406                  | 0.09976446  | 0.99309467  | -0.06072012 | 0.00095297  | -0.00000445 |             |             |
| 0.00031172                  | 0.00355522  | 0.06066378  | 0.99750928  | -0.03580959 | 0.00028190  |             |             |
| 0.00000417                  | 0.00005472  | 0.00122449  | 0.03580075  | 0.99920526  | -0.01748276 |             |             |
| 0.00000002                  | 0.00000033  | 0.00000873  | 0.00034448  | 0.01748164  | 0.99984713  |             |             |
| <i>J = 14, E+</i>           |             |             |             |             |             |             |             |
| 0.84393794                  | -0.53403020 | 0.05078859  | -0.00100377 | 0.00000925  | -0.00000004 | 0.00000000  | -0.00000000 |
| 0.53114626                  | 0.81859121  | -0.21840433 | 0.00957049  | -0.00015636 | 0.00000112  | -0.00000000 | 0.00000000  |
| 0.07503876                  | 0.21081842  | 0.96748121  | -0.11786305 | 0.00363205  | -0.00004167 | 0.00000019  | -0.00000000 |
| 0.00464269                  | 0.01659568  | 0.11693837  | 0.99026621  | -0.07347858 | 0.00147589  | -0.00001014 | 0.00000002  |
| 0.00014428                  | 0.00058840  | 0.00505837  | 0.07338215  | 0.99623896  | -0.04579034 | 0.00053071  | -0.00000141 |
| 0.00000233                  | 0.00001031  | 0.00009971  | 0.00189586  | 0.04577327  | 0.99861864  | -0.02572952 | 0.00011311  |
| 0.00000002                  | 0.00000008  | 0.00000088  | 0.00001990  | 0.00064848  | 0.02572671  | 0.99962282  | -0.00958804 |
| 0.00000000                  | 0.00000000  | 0.00000000  | 0.00000006  | 0.00000245  | 0.00013366  | 0.00958777  | 0.99995403  |
| <i>J = 14, O+</i>           |             |             |             |             |             |             |             |
| 0.97259794                  | -0.23200244 | 0.01510067  | -0.00029946 | 0.00000256  | -0.00000001 | 0.00000000  |             |
| 0.23152792                  | 0.96060029  | -0.15365132 | 0.00575935  | -0.00008026 | 0.00000047  | -0.00000000 |             |
| 0.02114781                  | 0.15280150  | 0.98368336  | -0.09255331 | 0.00232300  | -0.00002117 | 0.00000007  |             |
| 0.00091944                  | 0.00857896  | 0.09230776  | 0.99398312  | -0.05832284 | 0.00091123  | -0.00000431 |             |
| 0.00002063                  | 0.00022350  | 0.00309177  | 0.05828275  | 0.99767818  | -0.03509546 | 0.00027669  |             |
| 0.00000023                  | 0.00000281  | 0.00004532  | 0.00113849  | 0.03508832  | 0.99923322  | -0.01733466 |             |
| 0.00000000                  | 0.00000001  | 0.00000026  | 0.00000790  | 0.00033199  | 0.01733369  | 0.99984971  |             |
| <i>J = 14, O-</i>           |             |             |             |             |             |             |             |
| 0.91827040                  | -0.39549972 | 0.01895609  | -0.00033511 | 0.00000274  | -0.00000001 | 0.00000000  |             |
| 0.39351633                  | 0.90626774  | -0.15424160 | 0.00576172  | -0.00008026 | 0.00000047  | -0.00000000 |             |
| 0.04381716                  | 0.14895286  | 0.98352506  | -0.09255354 | 0.00232300  | -0.00002117 | 0.00000007  |             |
| 0.00210557                  | 0.00846993  | 0.09229890  | 0.99398308  | -0.05832284 | 0.00091123  | -0.00000431 |             |
| 0.00005018                  | 0.00022221  | 0.00309156  | 0.05828275  | 0.99767818  | -0.03509546 | 0.00027669  |             |
| 0.00000060                  | 0.00000281  | 0.00004532  | 0.00113849  | 0.03508832  | 0.99923322  | -0.01733466 |             |
| 0.00000000                  | 0.00000001  | 0.00000026  | 0.00000790  | 0.00033199  | 0.01733369  | 0.99984971  |             |
| <i>J = 14, E-</i>           |             |             |             |             |             |             |             |
| 0.97885842                  | -0.20432047 | 0.00945093  | -0.00015577 | 0.00000112  | -0.00000000 | 0.00000000  |             |
| 0.20399514                  | 0.97184595  | -0.11784836 | 0.00363202  | -0.00004167 | 0.00000019  | -0.00000000 |             |
| 0.01489705                  | 0.11723016  | 0.99026960  | -0.07347858 | 0.00147589  | -0.00001014 | 0.00000002  |             |
| 0.00050769                  | 0.00506680  | 0.07338230  | 0.99623896  | -0.04579034 | 0.00053071  | -0.00000141 |             |
| 0.00000868                  | 0.00009983  | 0.00189586  | 0.04577327  | 0.99861864  | -0.02572952 | 0.00011311  |             |
| 0.00000007                  | 0.00000088  | 0.00001990  | 0.00064848  | 0.02572671  | 0.99962282  | -0.00958804 |             |
| 0.00000000                  | 0.00000000  | 0.00000006  | 0.00000245  | 0.00013366  | 0.00958777  | 0.99995403  |             |
| <i>J = 15, E+</i>           |             |             |             |             |             |             |             |
| 0.82663728                  | -0.55878282 | 0.06655993  | -0.00153270 | 0.00001676  | -0.00000009 | 0.00000000  | -0.00000000 |
| 0.55578795                  | 0.79218351  | -0.25175651 | 0.01279221  | -0.00024786 | 0.00000219  | -0.00000001 | 0.00000000  |
| 0.08792929                  | 0.24432372  | 0.95596022  | -0.13670899 | 0.00500579  | -0.00007087 | 0.00000043  | -0.00000000 |
| 0.00624109                  | 0.02262865  | 0.13520379  | 0.98669983  | -0.08710745 | 0.00215963  | -0.00001990 | 0.00000006  |
| 0.00022838                  | 0.00095782  | 0.00695650  | 0.08695064  | 0.99458634  | -0.05645771 | 0.00087816  | -0.00000420 |
| 0.00000452                  | 0.00002077  | 0.00016937  | 0.00277315  | 0.05642731  | 0.99780617  | -0.03451107 | 0.00027237  |
| 0.00000005                  | 0.00000023  | 0.00000202  | 0.00003907  | 0.00107290  | 0.03450512  | 0.99925576  | -0.01720931 |
| 0.00000000                  | 0.00000000  | 0.00000001  | 0.00000022  | 0.00000728  | 0.00032185  | 0.01720846  | 0.99985187  |
| <i>J = 15, O+</i>           |             |             |             |             |             |             |             |
| 0.96714037                  | -0.25348773 | 0.01957705  | -0.00046029 | 0.00000477  | -0.00000002 | 0.00000000  | -0.00000000 |
| 0.25288806                  | 0.95119217  | -0.17669294 | 0.00778973  | -0.00013100 | 0.00000098  | -0.00000000 | 0.00000000  |
| 0.02617983                  | 0.17562244  | 0.97811841  | -0.10837422 | 0.00328347  | -0.00003815 | 0.00000018  | -0.00000000 |
| 0.00132106                  | 0.01157848  | 0.10798909  | 0.99159462  | -0.07029014 | 0.00140052  | -0.00000972 | 0.00000002  |
| 0.00003552                  | 0.00036402  | 0.00436726  | 0.07022244  | 0.99651858  | -0.04472192 | 0.00051757  | -0.00000139 |
| 0.00000051                  | 0.00000583  | 0.00008165  | 0.00174945  | 0.04470825  | 0.99867467  | -0.02543607 | 0.00011216  |
| 0.00000000                  | 0.00000004  | 0.00000069  | 0.00001782  | 0.00062096  | 0.02543366  | 0.99963069  | -0.00955089 |
| 0.00000000                  | 0.00000000  | 0.00000000  | 0.00000005  | 0.00000231  | 0.00013085  | 0.00955065  | 0.99995438  |

TABLE I.--TRANSFORMATION COEFFICIENTS--CONTINUED

| KAPPA = -0.900000 --CONTINUED. |              |              |              |              |              |              |              |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| J = 15, O --                   |              |              |              |              |              |              |              |
| 0.89329538                     | --0.44875087 | 0.02541155   | --0.00052349 | 0.00000515   | --0.00000003 | 0.00000000   | --0.00000000 |
| 0.44577359                     | 0.87729743   | --0.17769171 | 0.00779454   | --0.00013102 | 0.00000098   | --0.00000000 | 0.00000000   |
| 0.05743496                     | 0.16982850   | 0.97780552   | --0.10837477 | 0.00328347   | --0.00003815 | 0.00000018   | --0.00000000 |
| 0.00323821                     | 0.01140249   | 0.10796853   | 0.99159449   | --0.07029014 | 0.00140052   | --0.00000972 | 0.00000002   |
| 0.00009309                     | 0.00036211   | 0.00436667   | 0.07022243   | 0.99651858   | --0.04472192 | 0.00051757   | --0.00000139 |
| 0.00000141                     | 0.00000584   | 0.00008164   | 0.00174945   | 0.04470825   | 0.99867467   | --0.02543607 | 0.00011216   |
| 0.00000001                     | 0.00000004   | 0.00000069   | 0.00001782   | 0.00062096   | 0.02543366   | 0.99963069   | --0.00955089 |
| 0.00000000                     | 0.00000000   | 0.00000000   | 0.00000005   | 0.00000231   | 0.00013085   | 0.00955065   | 0.99995438   |
| J = 15, E --                   |              |              |              |              |              |              |              |
| 0.97275798                     | --0.23148115 | 0.01258309   | --0.00024665 | 0.00000218   | --0.00000001 | 0.00000000   |              |
| 0.23099812                     | 0.96329300   | --0.13667993 | 0.00560572   | --0.00007087 | 0.00000043   | --0.00000000 |              |
| 0.01952349                     | 0.13577327   | 0.98670770   | --0.08710745 | 0.00215963   | --0.00001990 | 0.00000006   |              |
| 0.00078759                     | 0.00697598   | 0.08695107   | 0.99458634   | --0.05645771 | 0.00087816   | --0.00000420 |              |
| 0.00001658                     | 0.00016971   | 0.00277316   | 0.05642731   | 0.99780617   | --0.03451107 | 0.00027237   |              |
| 0.00000018                     | 0.00000202   | 0.00003907   | 0.00107290   | 0.03450512   | 0.99925576   | --0.01720931 |              |
| 0.00000000                     | 0.00000001   | 0.00000022   | 0.00000728   | 0.00032185   | 0.01720846   | 0.99985187   |              |

TABLE II.—EXPECTATION VALUES

KAPPA = 0.000000

|        |                |               |               |               |
|--------|----------------|---------------|---------------|---------------|
| 2 0, 2 | -3.0940108-001 | 2.6794919-001 | 1.0717968+000 | 4.2871871+000 |
| 2 1, 2 | 0.0000000+000  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 1, 1 | 2.0000000+000  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 2, 1 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 2 2, 0 | 4.3094011+000  | 3.7320508+000 | 1.4928203+001 | 5.9712813+001 |
| 3 0, 3 | -1.2659863+000 | 7.7525513-001 | 3.1010205+000 | 1.2404082+001 |
| 3 1, 3 | -1.1639778+000 | 1.1270167+000 | 2.2701665+000 | 1.2558515+001 |
| 3 1, 2 | 2.7340137+000  | 1.3257654+000 | 4.2576539+000 | 3.0644650+001 |
| 3 2, 2 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 3 2, 1 | 5.2659863+000  | 3.2247449+000 | 1.2898979+001 | 5.1595918+001 |
| 3 3, 1 | 9.1639778+000  | 8.8729833+000 | 7.9729833+001 | 7.1744148+002 |
| 3 3, 0 | 9.2659863+000  | 8.6742346+000 | 7.7742346+001 | 6.9935535+002 |
| 4 0, 4 | -2.9481367+000 | 1.2504359+000 | 5.5044184+000 | 3.0060469+001 |
| 4 1, 4 | -2.9205543+000 | 1.3755878+000 | 4.7558782+000 | 3.5178492+001 |
| 4 1, 3 | 3.1389983+000  | 2.3542487+000 | 1.4542487+001 | 1.2423663+002 |
| 4 2, 3 | 3.7461123+000  | 4.2435807+000 | 2.0871613+001 | 1.4584310+002 |
| 4 2, 2 | 6.6666667+000  | 3.0769231+000 | 1.6923077+001 | 1.4153846+002 |
| 4 3, 2 | 9.5872210+000  | 8.6244122+000 | 7.7244122+001 | 6.9482151+002 |
| 4 3, 1 | 1.0194335+001  | 7.6457513+000 | 6.7457513+001 | 6.0576337+002 |
| 4 4, 1 | 1.6253888+001  | 1.5756419+001 | 2.5112839+002 | 4.0141569+003 |
| 4 4, 0 | 1.6281470+001  | 1.5672641+001 | 2.4957250+002 | 3.9884011+003 |
| 5 0, 5 | -5.3255289+000 | 1.6551182+000 | 8.5166331+000 | 6.4405098+001 |
| 5 1, 5 | -5.3188337+000 | 1.6926929+000 | 8.1048786+000 | 7.0263294+001 |
| 5 1, 4 | 2.8494260+000  | 3.8520524+000 | 3.0874218+001 | 3.0791605+002 |
| 5 2, 4 | 3.0717968+000  | 4.8038476+000 | 3.2076952+001 | 3.3409279+002 |
| 5 2, 3 | 8.1749548+000  | 3.7669684+000 | 3.4931898+001 | 4.5755198+002 |
| 5 3, 3 | 1.0000000+001  | 8.6363636+000 | 8.5000000+001 | 9.6318182+002 |
| 5 3, 2 | 1.1825045+001  | 6.5045362+000 | 6.3050838+001 | 7.4710445+002 |
| 5 4, 2 | 1.6928203+001  | 1.5196152+001 | 2.3992305+002 | 3.8259072+003 |
| 5 4, 1 | 1.7150574+001  | 1.4577913+001 | 2.2855147+002 | 3.6380429+003 |
| 5 5, 1 | 2.5318834+001  | 2.4670943+001 | 6.1389512+002 | 1.5321555+004 |
| 5 5, 0 | 2.5325529+001  | 2.4643411+001 | 6.1307494+002 | 1.5299979+004 |
| 6 0, 6 | -8.3785479+000 | 2.0267914+000 | 1.2325784+001 | 1.1864482+002 |
| 6 1, 6 | -8.3770265+000 | 2.0369551+000 | 1.2150133+001 | 1.2268329+002 |
| 6 1, 5 | 1.7797981+000  | 5.2634200+000 | 4.9948488+001 | 6.0997131+002 |
| 6 2, 5 | 1.8475661+000  | 5.6308236+000 | 4.9154299+001 | 6.4207506+002 |
| 6 2, 4 | 9.3237557+000  | 5.6821144+000 | 7.5782809+001 | 1.2137881+003 |
| 6 3, 4 | 1.0224593+001  | 9.1035704+000 | 1.0812722+002 | 1.6516280+003 |
| 6 3, 3 | 1.4000000+001  | 6.1428571+000 | 7.8142857+001 | 1.3690000+003 |
| 6 4, 3 | 1.7775407+001  | 1.4766681+001 | 2.4330711+002 | 4.3521198+003 |
| 6 4, 2 | 1.8676244+001  | 1.2696481+001 | 2.0469701+002 | 3.6749627+003 |
| 6 5, 2 | 2.6152434+001  | 2.3859474+001 | 5.8672265+002 | 1.4580689+004 |
| 6 5, 1 | 2.6220202+001  | 2.3593723+001 | 5.7890865+002 | 1.4376029+004 |
| 6 6, 1 | 3.6377027+001  | 3.5602495+001 | 1.2755386+003 | 4.5821805+004 |
| 6 6, 0 | 3.6378548+001  | 3.5594613+001 | 1.2751944+003 | 4.5808604+004 |
| 7 0, 7 | -1.2100774+001 | 2.3869927+000 | 1.6946509+001 | 1.9550936+002 |
| 7 1, 7 | -1.2100444+001 | 2.3895537+000 | 1.6882621+001 | 1.9763453+002 |
| 7 1, 6 | -1.8450669-002 | 6.4918548+000 | 7.1735252+001 | 1.0621657+003 |
| 7 2, 6 | -4.6169513-011 | 6.6122449+000 | 7.0897959+001 | 1.0902857+003 |
| 7 2, 5 | 9.7226138+000  | 8.3112344+000 | 1.3520968+002 | 2.5480922+003 |
| 7 3, 5 | 1.0074264+001  | 1.0090812+001 | 1.4878141+002 | 1.5229010+003 |
| 7 3, 4 | 1.6306957+001  | 7.2426776+000 | 1.3085437+002 | 3.0021356+003 |
| 7 4, 4 | 1.8666667+001  | 1.4775510+001 | 2.7191837+002 | 5.9474286+003 |
| 7 4, 3 | 2.1026376+001  | 1.0782242+001 | 1.9465473+002 | 4.4464522+003 |
| 7 5, 3 | 2.7259069+001  | 2.2979415+001 | 5.7501046+002 | 1.5220110+004 |
| 7 5, 2 | 2.7610720+001  | 2.1727314+001 | 5.3820922+002 | 1.4222897+004 |
| 7 6, 2 | 3.7333333+001  | 3.4612245+001 | 1.2251837+003 | 4.3778286+004 |
| 7 6, 1 | 3.7351784+001  | 3.4519531+001 | 1.2211891+003 | 4.3625946+004 |
| 7 7, 1 | 4.9433777+001  | 4.8540219+001 | 2.3673255+003 | 1.1572335+005 |
| 7 7, 0 | 4.9434107+001  | 4.8538154+001 | 2.3672012+003 | 1.1571680+005 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = 0.000000—CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 8 0, 8   | -1.6490437+001 | 2.7435085+000 | 2.2351317+001 | 2.9856163+002 |
| 8 1, 8   | -1.6490367+001 | 2.7441213+000 | 2.2330511+001 | 2.9949977+002 |
| 8 1, 7   | -2.5066078+000 | 7.6233266+000 | 9.7004172+001 | 1.6899197+003 |
| 8 2, 7   | -2.5019438+000 | 7.6588213+000 | 9.6539117+001 | 1.7084342+003 |
| 8 2, 6   | 9.2852272+000  | 1.0775661+001 | 2.0225471+002 | 4.4767343+003 |
| 8 3, 6   | 9.4009507+000  | 1.1500353+001 | 2.0547508+002 | 4.6777151+003 |
| 8 3, 5   | 1.8220749+001  | 1.0162279+001 | 2.3779749+002 | 6.4591412+003 |
| 8 4, 5   | 1.9412527+001  | 1.5462579+001 | 3.3428652+002 | 8.9744177+003 |
| 8 4, 4   | 2.4000000+001  | 1.0153846+001 | 2.2984615+002 | 6.8270769+003 |
| 8 5, 4   | 2.8587473+001  | 2.2343788+001 | 5.9444003+002 | 1.7940819+004 |
| 8 5, 3   | 2.9779251+001  | 1.8831156+001 | 4.8913800+002 | 1.4857682+004 |
| 8 6, 3   | 3.8599049+001  | 3.3398927+001 | 1.1887053+003 | 4.4079718+004 |
| 8 6, 2   | 3.8714773+001  | 3.2847821+001 | 1.1651191+003 | 4.3162997+004 |
| 8 7, 2   | 5.0501944+001  | 4.7411737+001 | 2.2857544+003 | 1.1108597+005 |
| 8 7, 1   | 5.0506608+001  | 4.7383238+001 | 2.2840603+003 | 1.1099726+005 |
| 8 8, 1   | 6.4490367+001  | 6.3479672+001 | 4.0444691+003 | 2.5819743+005 |
| 8 8, 0   | 6.4490437+001  | 6.3479163+001 | 4.0444287+003 | 2.5819463+005 |
| 9 0, 9   | -2.1547056+001 | 3.0987678+000 | 2.8520202+001 | 4.3183445+002 |
| 9 1, 9   | -2.1547041+001 | 3.0989088+000 | 2.8513958+001 | 4.3219972+002 |
| 9 1, 8   | -5.6695551+000 | 8.7161848+000 | 1.2604630+002 | 2.5176935+003 |
| 9 2, 8   | -5.6684370+000 | 8.7258979+000 | 1.2584626+002 | 2.5275981+003 |
| 9 2, 7   | 8.0820775+000  | 1.2906158+001 | 2.7522009+002 | 7.0570950+003 |
| 9 3, 7   | 8.1161586+000  | 1.3158401+001 | 2.7518676+002 | 7.1769048+003 |
| 9 3, 6   | 1.9327178+001  | 1.4059089+001 | 3.8618372+002 | 1.2085510+004 |
| 9 4, 6   | 1.9813607+001  | 1.6882980+001 | 4.3333003+002 | 1.3757163+004 |
| 9 4, 5   | 2.7122601+001  | 1.1706235+001 | 3.4616276+002 | 1.2521618+004 |
| 9 5, 5   | 3.0000000+001  | 2.2339056+001 | 6.6251073+002 | 2.3575558+004 |
| 9 5, 4   | 3.2877399+001  | 1.6022333+001 | 4.6584198+002 | 1.7209548+004 |
| 9 6, 4   | 4.0186393+001  | 3.2162569+001 | 1.1827259+003 | 4.7791563+004 |
| 9 6, 3   | 4.0672822+001  | 3.0068322+001 | 1.0926297+003 | 4.4109215+004 |
| 9 7, 3   | 5.1883841+001  | 4.5984163+001 | 2.2165865+003 | 1.1022287+005 |
| 9 7, 2   | 5.1917922+001  | 4.5783041+001 | 2.2047381+003 | 1.0959585+005 |
| 9 8, 2   | 6.5668437+001  | 6.2228553+001 | 3.9220978+003 | 2.4888368+005 |
| 9 8, 1   | 6.5669555+001  | 6.2220517+001 | 3.9214672+003 | 2.4884024+005 |
| 9 9, 1   | 8.1547041+001  | 8.0419471+001 | 6.4862020+003 | 5.2403747+005 |
| 9 9, 0   | 8.1547056+001  | 8.0419351+001 | 6.4861899+003 | 5.2403640+005 |
| 10 0,10  | -2.7270487+001 | 3.4535082+000 | 3.5443991+001 | 5.9944378+002 |
| 10 1,10  | -2.7270484+001 | 3.4535397+000 | 3.5442231+001 | 5.9957312+002 |
| 10 1, 9  | -9.5023107+000 | 9.7944710+000 | 1.5889053+002 | 3.5722059+003 |
| 10 2, 9  | -9.5020531+000 | 9.7969843+000 | 1.5881657+002 | 3.5767522+003 |
| 10 2, 8  | 6.1704504+000  | 1.4845302+001 | 3.5617897+002 | 1.0386276+004 |
| 10 3, 8  | 6.1797510+000  | 1.4924439+001 | 3.5569789+002 | 1.0451892+004 |
| 10 3, 7  | 1.9540242+001  | 1.7693538+001 | 5.4907795+002 | 1.9624529+004 |
| 10 4, 7  | 1.9709382+001  | 1.8889436+001 | 5.6557734+002 | 2.0542657+004 |
| 10 4, 6  | 2.9817571+001  | 1.5739341+001 | 5.7037712+002 | 2.3780143+004 |
| 10 5, 6  | 3.1298062+001  | 2.3246595+001 | 7.9260727+002 | 3.3025031+004 |
| 10 5, 5  | 3.6666667+001  | 1.5080880+001 | 5.3137981+002 | 2.3926081+004 |
| 10 6, 5  | 4.2035272+001  | 3.1299503+001 | 1.2318620+003 | 5.6341189+004 |
| 10 6, 4  | 4.3515763+001  | 2.6012985+001 | 9.9932564+002 | 4.6046056+004 |
| 10 7, 4  | 5.3623951+001  | 4.4325363+001 | 2.1735043+003 | 1.1449175+005 |
| 10 7, 3  | 5.3793091+001  | 4.3383175+001 | 2.1181165+003 | 1.1146412+005 |
| 10 8, 3  | 6.7153582+001  | 6.0654812+001 | 3.8119653+003 | 2.4546118+005 |
| 10 8, 2  | 6.7162883+001  | 6.0589626+001 | 3.8068988+003 | 2.4511024+005 |
| 10 9, 2  | 8.2835386+001  | 7.9050064+001 | 6.3117483+003 | 5.0687675+005 |
| 10 9, 1  | 8.2835644+001  | 7.9047937+001 | 6.3115352+003 | 5.0685807+005 |
| 10 10, 1 | 1.0060382+002  | 9.9359265+001 | 9.8957789+003 | 9.8703822+005 |
| 10 10, 0 | 1.0060382+002  | 9.9359238+001 | 9.8957755+003 | 9.8703785+005 |
| 11 0,11  | -3.3660674+001 | 3.8079732+000 | 4.3119277+001 | 8.0546096+002 |
| 11 1,11  | -3.3660674+001 | 3.8079801+000 | 4.3118805+001 | 8.0550346+002 |
| 11 1,10  | -1.4003230+001 | 1.0866758+001 | 1.9551202+002 | 4.8816050+003 |
| 11 2,10  | -1.4003172+001 | 1.0867380+001 | 1.9548737+002 | 4.8834619+003 |
| 11 2, 9  | 3.5753662+000  | 1.6701023+001 | 4.4637168+002 | 1.4566931+004 |

TABLE II. -- EXPECTATION VALUES -- CONTINUED

KAPPA = 0.000000 -- CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 11 3, 9  | 3.5777655+000  | 1.6724058+001 | 4.4606345+002 | 1.4599451+004 |
| 11 3, 8  | 1.8947893+001  | 2.0808869+001 | 7.2059568+002 | 2.9064967+004 |
| 11 4, 8  | 1.9000694+001  | 2.1244397+001 | 7.2471967+002 | 2.9522444+004 |
| 11 4, 7  | 3.1647694+001  | 2.1033192+001 | 8.7245404+002 | 4.1108638+004 |
| 11 5, 7  | 3.2272707+001  | 2.5110311+001 | 9.8847266+002 | 4.7092189+004 |
| 11 5, 6  | 4.0617722+001  | 3.9561652+001 | 7.4963513+002 | 3.9489130+004 |
| 11 6, 6  | 4.4000000+001  | 3.1272727+001 | 1.3632727+003 | 7.1540364+004 |
| 11 6, 5  | 4.7382278+001  | 2.2199179+001 | 9.4914696+002 | 5.1421569+004 |
| 11 7, 5  | 5.5727293+001  | 4.2701251+001 | 2.1813417+003 | 1.2578744+005 |
| 11 7, 4  | 5.6352306+001  | 3.9561652+001 | 1.9951832+003 | 1.1501854+005 |
| 11 8, 4  | 6.8999306+001  | 5.8743356+001 | 3.7241772+003 | 2.4957514+005 |
| 11 8, 3  | 6.9052107+001  | 5.8387029+001 | 3.6966318+003 | 2.4762608+005 |
| 11 9, 3  | 8.4422234+001  | 7.7357410+001 | 6.1505381+003 | 4.9862723+005 |
| 11 9, 2  | 8.4424634+001  | 7.7337429+001 | 6.1486097+003 | 4.9862723+005 |
| 11 10, 2 | 1.0200317+002  | 9.7872139+001 | 9.6563430+003 | 9.5743859+005 |
| 11 10, 1 | 1.0200323+002  | 9.7871603+001 | 9.6562762+003 | 9.5743132+005 |
| 11 11, 1 | 1.2166067+002  | 1.2029899+002 | 1.4500465+004 | 1.7500942+006 |
| 11 11, 0 | 1.2166067+002  | 1.2029898+002 | 1.4500464+004 | 1.7500941+006 |
| 12 0,12  | -4.0717591+001 | 4.1622612+000 | 5.1544955+001 | 1.0539092+003 |
| 12 1,12  | -4.0717591+001 | 4.1622626+000 | 5.1544834+001 | 1.0539224+003 |
| 12 1,11  | -1.9171695+001 | 1.1936074+001 | 2.3589204+002 | 6.4743152+003 |
| 12 2,11  | -1.9171683+001 | 1.1936223+001 | 2.3588443+002 | 6.4750071+003 |
| 12 2,10  | 3.0611005-001  | 1.8521875+001 | 5.4619299+002 | 1.9702042+004 |
| 12 3,10  | 3.0670260-001  | 1.8528206+001 | 5.4605352+002 | 1.9716650+004 |
| 12 3, 9  | 1.7625295+001  | 2.3609941+001 | 9.0523664+002 | 4.0667854+004 |
| 12 4, 9  | 1.7640573+001  | 2.3753263+001 | 9.0577356+002 | 4.0883305+004 |
| 12 4, 8  | 3.2527198+001  | 2.5951392+001 | 1.1972519+003 | 6.3179691+004 |
| 12 5, 8  | 3.2753889+001  | 2.7731591+001 | 1.2433145+003 | 6.6326507+004 |
| 12 5, 7  | 4.4106788+001  | 2.2374275+001 | 1.1593209+003 | 6.8992327+004 |
| 12 6, 7  | 4.5874111+001  | 3.2402956+001 | 1.5970429+003 | 9.5366404+004 |
| 12 6, 6  | 5.2000000+001  | 2.0902518+001 | 1.0558334+003 | 6.7066485+004 |
| 12 7, 6  | 5.8125889+001  | 4.1591789+001 | 2.2769683+003 | 1.4688625+005 |
| 12 7, 5  | 5.9893212+001  | 3.4214094+001 | 1.8293169+003 | 1.1890951+005 |
| 12 8, 5  | 7.1246111+001  | 5.6600757+001 | 3.6779191+003 | 2.6332394+005 |
| 12 8, 4  | 7.1472802+001  | 5.5160595+001 | 3.5664685+003 | 2.5511967+005 |
| 12 9, 4  | 8.6359427+001  | 7.5292404+001 | 6.0105022+003 | 5.0135272+005 |
| 12 9, 3  | 8.6374705+001  | 7.5171998+001 | 5.9986366+003 | 5.0092465+005 |
| 12 10, 3 | 1.0369330+002  | 9.6068152+001 | 9.4318489+003 | 9.4087762+005 |
| 12 10, 2 | 1.0369389+002  | 9.6062710+001 | 9.4311774+003 | 9.4080452+005 |
| 12 11, 2 | 1.2317168+002  | 1.1869375+002 | 1.4181617+004 | 1.7016699+006 |
| 12 11, 1 | 1.2317170+002  | 1.1869362+002 | 1.4181597+004 | 1.7016673+006 |
| 12 12, 1 | 1.4471759+002  | 1.4323865+002 | 2.0551531+004 | 2.9520177+006 |
| 12 12, 0 | 1.4471759+002  | 1.4323865+002 | 2.0551531+004 | 2.9520177+006 |
| 13 0,13  | -4.8441221+001 | 4.5164224+000 | 6.0720704+001 | 1.3487847+003 |
| 13 1,13  | -4.8441221+001 | 4.5164227+000 | 6.0720674+001 | 1.3487886+003 |
| 13 1,12  | -2.5007421+001 | 1.3003604+001 | 2.8002244+002 | 8.3785907+003 |
| 13 2,12  | -2.5007418+001 | 1.3003639+001 | 2.8002023+002 | 8.3788301+003 |
| 13 2,11  | -3.6338378+000 | 2.0326780+001 | 6.5572503+002 | 2.5894348+004 |
| 13 3,11  | -3.6336964+000 | 2.0328442+001 | 6.5567181+002 | 2.5900354+004 |
| 13 3,10  | 1.5607945+001  | 2.6265019+001 | 1.1064150+003 | 5.4735492+004 |
| 13 4,10  | 1.5612119+001  | 2.6308811+001 | 1.1062684+003 | 5.4831932+004 |
| 13 4, 9  | 3.2560104+001  | 3.0134857+001 | 1.5308551+003 | 8.9588262+004 |
| 13 5, 9  | 3.2634168+001  | 3.0806781+001 | 1.5455184+003 | 9.1054875+004 |
| 13 5, 8  | 4.6674215+001  | 2.9188008+001 | 1.7003729+003 | 1.1262695+005 |
| 13 6, 8  | 4.7440638+001  | 3.4721554+001 | 1.9377593+003 | 1.2950467+005 |
| 13 6, 7  | 5.6789694+001  | 2.3477418+001 | 1.4242488+003 | 1.0314539+005 |
| 13 7, 7  | 6.0666667+001  | 4.1535582+001 | 2.5006943+003 | 1.8143409+005 |
| 13 7, 6  | 6.4543639+001  | 2.9292876+001 | 1.7311323+003 | 1.2908061+005 |
| 13 8, 6  | 7.3892696+001  | 5.4560598+001 | 3.7090318+003 | 2.9000168+005 |
| 13 8, 5  | 7.4659118+001  | 5.0176686+001 | 3.3661329+003 | 2.6324644+005 |
| 13 9, 5  | 8.8699166+001  | 7.2855530+001 | 5.9043889+003 | 5.1726675+005 |
| 13 9, 4  | 8.8773230+001  | 7.2294702+001 | 5.8492694+003 | 5.1221202+005 |
| 13 10, 4 | 1.0572121+002  | 9.3890632+001 | 9.2295657+003 | 9.4005233+005 |



TABLE II.--EXPECTATION VALUES--CONTINUED

KAPPA = 0.000000 --CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 13 10, 3 | 1.0572539+002  | 9.3853101+001 | 9.2249684+003 | 9.3954708+005 |
| 13 11, 3 | 1.2496703+002  | 1.1677899+002 | 1.3879758+004 | 1.6717330+006 |
| 13 11, 2 | 1.2496717+002  | 1.1677754+002 | 1.3879540+004 | 1.6717042+006 |
| 13 12, 2 | 1.4634075+002  | 1.4151477+002 | 2.0137355+004 | 2.8761746+006 |
| 13 12, 1 | 1.4634075+002  | 1.4151474+002 | 2.0137349+004 | 2.8761737+006 |
| 13 13, 1 | 1.6977455+002  | 1.6817825+002 | 2.8324248+004 | 4.7750771+006 |
| 13 13, 0 | 1.6977455+002  | 1.6817825+002 | 2.8324248+004 | 4.7750771+006 |
| 14 0,14  | -5.6831553+001 | 4.8704879+000 | 7.0646441+001 | 1.6940717+003 |
| 14 1,14  | -5.6831553+001 | 4.8704880+000 | 7.0646433+001 | 1.6940728+003 |
| 14 1,13  | -3.1510245+001 | 1.4069907+001 | 3.2790071+002 | 1.0622488+004 |
| 14 2,13  | -3.1510244+001 | 1.4069915+001 | 3.2790009+002 | 1.0622566+004 |
| 14 2,12  | -8.2429982+000 | 2.2123076+001 | 7.7497680+002 | 3.3245711+004 |
| 14 3,12  | -8.2429654+000 | 2.2123497+001 | 7.7495858+002 | 3.3247998+004 |
| 14 3,11  | 1.2910164+001  | 2.8854784+001 | 1.3255326+003 | 7.1552839+004 |
| 14 4,11  | 1.2911254+001  | 2.8867416+001 | 1.3253836+003 | 7.1593709+004 |
| 14 4,10  | 3.1838679+001  | 3.3854689+001 | 1.8817564+003 | 1.2091061+005 |
| 14 5,10  | 3.1861132+001  | 3.4084439+001 | 1.8855120+003 | 1.2154938+005 |
| 14 5, 9  | 4.8234104+001  | 3.5499888+001 | 2.2728379+003 | 1.6619729+005 |
| 14 6, 9  | 4.8521632+001  | 3.7976798+001 | 2.3735612+003 | 1.7496085+005 |
| 14 6, 8  | 6.1083504+001  | 3.0037470+001 | 2.1059063+003 | 1.6969606+005 |
| 14 7, 8  | 6.3136029+001  | 4.2891412+001 | 2.8815208+003 | 2.3334749+005 |
| 14 7, 7  | 7.0000000+001  | 2.7601876+001 | 1.8897332+003 | 1.6099719+005 |
| 14 8, 7  | 7.6863971+001  | 5.3187368+001 | 3.8707437+003 | 3.3475803+005 |
| 14 8, 6  | 7.8916496+001  | 4.3412214+001 | 3.0882770+003 | 2.6908020+005 |
| 14 9, 6  | 9.1478368+001  | 7.0194350+001 | 5.8585707+003 | 5.4957220+005 |
| 14 9, 5  | 9.1765896+001  | 6.8148733+001 | 5.6568456+003 | 5.3025962+005 |
| 14 10, 5 | 1.0813887+002  | 9.1292741+001 | 9.0581276+003 | 9.5746673+005 |
| 14 10, 4 | 1.0816132+002  | 9.1096671+001 | 9.0342199+003 | 9.5478575+005 |
| 14 11, 4 | 1.2708875+002  | 1.1450053+002 | 1.3602428+004 | 1.6638506+006 |
| 14 11, 3 | 1.2708984+002  | 1.1448954+002 | 1.3600788+004 | 1.6636326+006 |
| 14 12, 3 | 1.4824297+002  | 1.3948794+002 | 1.9742396+004 | 2.8258233+006 |
| 14 12, 2 | 1.4824300+002  | 1.3948757+002 | 1.9742330+004 | 2.8258128+006 |
| 14 13, 2 | 1.7151024+002  | 1.6633528+002 | 2.7797363+004 | 4.6605533+006 |
| 14 13, 1 | 1.7151024+002  | 1.6633527+002 | 2.7797362+004 | 4.6605530+006 |
| 14 14, 1 | 1.9683155+002  | 1.9511782+002 | 3.8117888+004 | 7.4532548+006 |
| 14 14, 0 | 1.9683155+002  | 1.9511782+002 | 3.8117888+004 | 7.4532548+006 |
| 15 0,15  | -6.5888580+001 | 5.2244790+000 | 8.1322149+001 | 2.0937499+003 |
| 15 1,15  | -6.5888580+001 | 5.2244790+000 | 8.1322147+001 | 2.0937502+003 |
| 15 1,14  | -3.8680062+001 | 1.5135301+001 | 3.7952648+002 | 1.3233945+004 |
| 15 2,14  | -3.8680062+001 | 1.5135303+001 | 3.7952631+002 | 1.3233969+004 |
| 15 2,13  | -1.3520616+001 | 2.3913907+001 | 9.0394931+002 | 4.1857010+004 |
| 15 3,13  | -1.3520609+001 | 2.3914010+001 | 9.0394354+002 | 4.1857825+004 |
| 15 3,12  | 9.5378017+000  | 3.1412703+001 | 1.5630498+003 | 9.1389352+004 |
| 15 4,12  | 9.5380761+000  | 3.1416181+001 | 1.5629747+003 | 9.1405712+004 |
| 15 4,11  | 3.0409108+001  | 3.7348748+001 | 2.2574375+003 | 1.5787840+005 |
| 15 5,11  | 3.0415536+001  | 3.7421781+001 | 2.2581299+003 | 1.5814427+005 |
| 15 5,10  | 4.8905316+001  | 4.0833902+001 | 2.8493924+003 | 2.2815078+005 |
| 15 6,10  | 4.9002794+001  | 4.1796592+001 | 2.8849278+003 | 2.3214305+005 |
| 15 6, 9  | 6.4399871+001  | 3.8488297+001 | 2.9933648+003 | 2.6525237+005 |
| 15 7, 9  | 6.5309901+001  | 4.5676916+001 | 3.4248314+003 | 3.0577489+005 |
| 15 7, 8  | 7.5636728+001  | 3.0742338+001 | 2.4668530+003 | 2.3530302+005 |
| 15 8, 8  | 8.0000000+001  | 5.3095059+001 | 4.2206998+003 | 4.0442312+005 |
| 15 8, 7  | 8.4363272+001  | 3.7287245+001 | 2.9121004+003 | 2.8573200+005 |
| 15 9, 7  | 9.4690099+001  | 6.7712065+001 | 5.9233746+003 | 6.0387329+005 |
| 15 9, 6  | 9.5600129+001  | 6.1888490+001 | 5.3422010+003 | 5.4493891+005 |
| 15 10, 6 | 1.1099721+002  | 8.8292401+001 | 8.9335207+003 | 9.9601900+005 |
| 15 10, 5 | 1.1109468+002  | 8.7475928+001 | 8.8340228+003 | 9.8449802+005 |
| 15 11, 5 | 1.2958446+002  | 1.1179848+002 | 1.3356640+004 | 1.6811297+006 |
| 15 11, 4 | 1.2959089+002  | 1.1173509+002 | 1.3347238+004 | 1.6798613+006 |
| 15 12, 4 | 1.5046192+002  | 1.3710907+002 | 1.9374894+004 | 2.8056372+006 |
| 15 12, 3 | 1.5046220+002  | 1.3710600+002 | 1.9374347+004 | 2.8055506+006 |
| 15 13, 3 | 1.7352061+002  | 1.6419492+002 | 2.7292036+004 | 4.5803410+006 |
| 15 13, 2 | 1.7352062+002  | 1.6419483+002 | 2.7292017+004 | 4.5803374+006 |

TABLE II.--EXPECTATION VALUES--CONTINUED

KAPPA = 0.000000 --CONTINUED

|          |                |                |                |                |
|----------|----------------|----------------|----------------|----------------|
| 15 14, 2 | 1.9868006 +002 | 1.9315540 +002 | 3.7459456 +004 | 7.2856179 +006 |
| 15 14, 1 | 1.9868006 +002 | 1.9315540 +002 | 3.7459456 +004 | 7.2856179 +006 |
| 15 15, 1 | 2.2588858 +002 | 2.2405735 +002 | 5.0255722 +004 | 1.1281225 +007 |
| 15 15, 0 | 2.2588858 +002 | 2.2405735 +002 | 5.0255722 +004 | 1.1281225 +007 |

KAPPA = -- 0.100000

|        |                 |                |                |                |
|--------|-----------------|----------------|----------------|----------------|
| 2 0, 2 | -2.3862601 -001 | 2.1318971 -001 | 8.5275882 -001 | 3.4110353 +000 |
| 2 1, 2 | 1.2903226 -001  | 1.0000000 +000 | 1.0000000 +000 | 1.0000000 +000 |
| 2 1, 1 | 1.8709677 +000  | 1.0000000 +000 | 1.0000000 +000 | 1.0000000 +000 |
| 2 2, 1 | 4.0000000 +000  | 4.0000000 +000 | 1.6000000 +001 | 6.4000000 +001 |
| 2 2, 0 | 4.2386260 +000  | 3.7868103 +000 | 1.5147241 +001 | 6.0588965 +001 |
| 3 0, 3 | -1.0095236 +000 | 6.7088597 -001 | 2.6835439 +000 | 1.0734175 +001 |
| 3 1, 3 | -8.7003113 -001 | 1.1024957 +000 | 2.0249572 +000 | 1.0327110 +001 |
| 3 1, 2 | 2.5460390 +000  | 1.2356700 +000 | 3.3566995 +000 | 2.2445965 +001 |
| 3 2, 2 | 4.0000000 +000  | 4.0000000 +000 | 1.6000000 +001 | 6.4000000 +001 |
| 3 2, 1 | 5.0095236 +000  | 3.3291140 +000 | 1.3316456 +001 | 5.3265825 +001 |
| 3 3, 1 | 9.1280956 +000  | 8.8975043 +000 | 7.9975043 +001 | 7.1967289 +002 |
| 3 3, 0 | 9.1958964 +000  | 8.7643300 +000 | 7.8643300 +001 | 7.0755403 +002 |
| 4 0, 4 | -2.4137352 +000 | 1.1385536 +000 | 4.9243017 +000 | 2.5618606 +001 |
| 4 1, 4 | -2.3702426 +000 | 1.3156249 +000 | 4.1562491 +000 | 2.9721867 +001 |
| 4 1, 3 | 3.0158640 +000  | 2.0330927 +000 | 1.1333927 +001 | 9.5011438 +001 |
| 4 2, 3 | 3.8064516 +000  | 4.1875000 +000 | 1.9750000 +001 | 1.2700000 +002 |
| 4 2, 2 | 6.2043885 +000  | 3.0968203 +000 | 1.5715871 +001 | 1.1612093 +002 |
| 4 3, 2 | 9.4670167 +000  | 8.6843751 +000 | 7.7843751 +001 | 7.0027813 +002 |
| 4 3, 1 | 9.8873618 +000  | 7.9669073 +000 | 7.0669073 +001 | 6.3498856 +002 |
| 4 4, 1 | 1.6193548 +001  | 1.5812500 +001 | 2.5225000 +002 | 4.0330000 +003 |
| 4 4, 0 | 1.6209347 +001  | 1.5764626 +001 | 2.5135983 +002 | 4.0182605 +003 |
| 5 0, 5 | -4.4323658 +000 | 1.5401100 +000 | 7.6430410 +000 | 5.4293779 +001 |
| 5 1, 5 | -4.4202165 +000 | 1.6012718 +000 | 7.1375487 +000 | 6.0084815 +001 |
| 5 1, 4 | 2.9470326 +000  | 3.3729149 +000 | 2.5597148 +001 | 2.4731522 +002 |
| 5 2, 4 | 3.2841220 +000  | 4.6395691 +000 | 2.8791382 +001 | 2.7889522 +002 |
| 5 2, 3 | 7.5852452 +000  | 3.4733421 +000 | 2.8047972 +001 | 3.3866554 +002 |
| 5 3, 3 | 9.8244914 +000  | 8.6460145 +000 | 8.3220100 +001 | 8.9838574 +002 |
| 5 3, 2 | 1.1163609 +001  | 6.8878953 +000 | 6.5164076 +001 | 7.2177778 +002 |
| 5 4, 2 | 1.6715878 +001  | 1.5360431 +001 | 2.4320862 +002 | 3.8811048 +003 |
| 5 4, 1 | 1.6847121 +001  | 1.4986548 +001 | 2.3630899 +002 | 3.7670407 +003 |
| 5 5, 1 | 2.5240886 +001  | 2.4752714 +001 | 6.1664235 +002 | 1.5396529 +004 |
| 5 5, 0 | 2.5244197 +001  | 2.4739190 +001 | 6.1623878 +002 | 1.5385907 +004 |
| 6 0, 6 | -7.0441715 +000 | 1.9018209 +000 | 1.1036451 +001 | 1.0022613 +002 |
| 6 1, 6 | -7.0409975 +000 | 1.9208298 +000 | 1.0783677 +001 | 1.0493376 +002 |
| 6 1, 5 | 2.1971278 +000  | 4.7725920 +000 | 4.3209526 +001 | 5.0123211 +002 |
| 6 2, 5 | 2.3165389 +000  | 5.3455383 +000 | 4.3258082 +001 | 5.3555059 +002 |
| 6 2, 4 | 8.7968181 +000  | 4.8507620 +000 | 5.8525119 +001 | 8.9382195 +002 |
| 6 3, 4 | 1.0069282 +001  | 8.9520973 +000 | 1.0057950 +002 | 1.4266894 +003 |
| 6 3, 3 | 1.2990444 +001  | 6.2356802 +000 | 7.2152568 +001 | 1.1352987 +003 |
| 6 4, 3 | 1.7399335 +001  | 1.4950444 +001 | 2.4401311 +002 | 4.2475858 +003 |
| 6 4, 2 | 1.7962578 +001  | 1.3546737 +001 | 2.1785564 +002 | 3.7946932 +003 |
| 6 5, 2 | 2.5874941 +001  | 2.4127073 +001 | 5.9563682 +002 | 1.4823377 +004 |
| 6 5, 1 | 2.5909202 +001  | 2.3991728 +001 | 5.9163791 +002 | 1.4718469 +004 |
| 6 6, 1 | 3.6284126 +001  | 3.5704018 +001 | 1.2807288 +003 | 4.6032864 +004 |
| 6 6, 0 | 3.6284775 +001  | 3.5700680 +001 | 1.2805828 +003 | 4.6027259 +004 |
| 7 0, 7 | -1.0240619 +001 | 2.2473473 +000 | 1.5157264 +001 | 1.6578428 +002 |
| 7 1, 7 | -1.0239827 +001 | 2.2528482 +000 | 1.5050384 +001 | 1.6867057 +002 |
| 7 1, 6 | 7.8979055 -001  | 6.0074411 +000 | 6.3080230 +001 | 8.8155804 +002 |
| 7 2, 6 | 8.2737643 -001  | 6.2253943 +000 | 6.2322949 +001 | 9.1337599 +002 |
| 7 2, 5 | 9.4637998 +000  | 7.1546631 +000 | 1.0923358 +002 | 1.9587441 +003 |
| 7 3, 5 | 1.0049551 +001  | 9.6994980 +000 | 1.3281778 +002 | 2.3879749 +003 |
| 7 3, 4 | 1.5092583 +001  | 6.6320092 +000 | 1.0508874 +002 | 2.2224227 +003 |
| 7 4, 4 | 1.8166424 +001  | 1.4815449 +001 | 2.6300474 +002 | 5.4169531 +003 |
| 7 4, 3 | 1.9762593 +001  | 1.1679161 +001 | 2.0268347 +002 | 4.2725566 +003 |

TABLE II.--EXPECTATION VALUES--CONTINUED

| KAPPA = -0.100000--CONTINUED |                |               |               |               |
|------------------------------|----------------|---------------|---------------|---------------|
| 7 5, 3                       | 2.6734546+001  | 2.3389037+001 | 5.8419856+002 | 1.5233384+004 |
| 7 5, 2                       | 2.6919839+001  | 2.2702688+001 | 5.6394329+002 | 1.4688451+004 |
| 7 6, 2                       | 3.7006200+001  | 3.4959156+001 | 1.2426723+003 | 4.4485671+004 |
| 7 6, 1                       | 3.7014226+001  | 3.4918829+001 | 1.2409257+003 | 4.4418915+004 |
| 7 7, 1                       | 4.9326697+001  | 4.8658616+001 | 2.3759333+003 | 1.1621397+005 |
| 7 7, 0                       | 4.9326819+001  | 4.8657862+001 | 2.3758877+003 | 1.1621157+005 |
| 8 0, 8                       | -1.4018990+001 | 2.5870840+000 | 1.9992432+001 | 2.5378205+002 |
| 8 1, 8                       | -1.4018798+001 | 2.5885956+000 | 1.9952137+001 | 2.5525883+002 |
| 8 1, 7                       | -1.2326939+000 | 7.1199717+000 | 8.5780814+001 | 1.4115422+003 |
| 8 2, 7                       | -1.2217414+000 | 7.1941836+000 | 8.5176080+001 | 1.4351893+003 |
| 8 2, 6                       | 9.4025942+000  | 9.6280458+000 | 1.7112903+002 | 3.5764698+003 |
| 8 3, 6                       | 9.6288230+000  | 1.0863877+001 | 1.8010209+002 | 3.8671670+003 |
| 8 3, 5                       | 1.7069196+001  | 8.5483232+000 | 1.8087014+002 | 4.6300569+003 |
| 8 4, 5                       | 1.8882613+001  | 1.5183027+001 | 3.0823015+002 | 7.7033865+003 |
| 8 4, 4                       | 2.2225358+001  | 1.0413543+001 | 2.1312243+002 | 5.7287057+003 |
| 8 5, 4                       | 2.7806961+001  | 2.2729142+001 | 5.9308604+002 | 1.7148273+004 |
| 8 5, 3                       | 2.8481961+001  | 2.0523967+001 | 5.2712551+002 | 1.5262497+004 |
| 8 6, 3                       | 3.7969850+001  | 3.4008854+001 | 1.2129219+003 | 4.4616435+004 |
| 8 6, 2                       | 3.8021738+001  | 3.3757552+001 | 1.2020970+003 | 4.4196939+004 |
| 8 7, 2                       | 5.0131401+001  | 4.7818386+001 | 2.3148597+003 | 1.1273330+005 |
| 8 7, 1                       | 5.0133151+001  | 4.7807738+001 | 2.3142235+003 | 1.1269990+005 |
| 8 8, 1                       | 6.4369278+001  | 6.3613936+001 | 4.0576719+003 | 2.5920499+005 |
| 8 8, 0                       | 6.4369300+001  | 6.3613775+001 | 4.0576591+003 | 2.5920410+005 |
| 9 0, 9                       | -1.8378469+001 | 2.9247656+000 | 2.5522542+001 | 3.6752125+002 |
| 9 1, 9                       | -1.8378423+001 | 2.9251649+000 | 2.5508573+001 | 3.6818585+002 |
| 9 1, 8                       | -3.8490971+000 | 8.1748802+000 | 1.1175412+002 | 2.1124195+003 |
| 9 2, 8                       | -3.8460745+000 | 8.1982786+000 | 1.1142823+002 | 2.1269696+003 |
| 9 2, 7                       | 8.6335266+000  | 1.1820129+001 | 2.3839445+002 | 5.7582466+003 |
| 9 3, 7                       | 8.7110073+000  | 1.2324836+001 | 2.4046958+002 | 5.9377091+003 |
| 9 3, 6                       | 1.8502111+001  | 1.1870372+001 | 3.0442099+002 | 8.9905722+003 |
| 9 4, 6                       | 1.9386594+001  | 1.6178562+001 | 3.8482110+002 | 1.1422989+004 |
| 9 4, 5                       | 2.5055467+001  | 1.0677555+001 | 2.7758103+002 | 9.2509649+003 |
| 9 5, 5                       | 2.9016230+001  | 2.2441691+001 | 6.3613440+002 | 2.1218104+004 |
| 9 5, 4                       | 3.0811730+001  | 1.7724263+001 | 4.9055670+002 | 1.6665466+004 |
| 9 6, 4                       | 3.9203181+001  | 3.2937690+001 | 1.2013953+003 | 4.7174381+004 |
| 9 6, 3                       | 3.9432814+001  | 3.1894668+001 | 1.1563505+003 | 4.5361688+004 |
| 9 7, 3                       | 5.1174715+001  | 4.6738984+001 | 2.2615046+003 | 1.1199190+005 |
| 9 7, 2                       | 5.1187812+001  | 4.6661193+001 | 2.2568887+003 | 1.1174774+005 |
| 9 8, 2                       | 6.5256300+001  | 6.2685469+001 | 3.9663553+003 | 2.5223566+005 |
| 9 8, 1                       | 6.5256662+001  | 6.2682883+001 | 3.9661514+003 | 2.5222158+005 |
| 9 9, 1                       | 8.1411955+001  | 8.0569324+001 | 6.5053828+003 | 5.2592910+005 |
| 9 9, 0                       | 8.1411959+001  | 8.0569292+001 | 6.5053795+003 | 5.2592881+005 |
| 10 0, 10                     | -2.3318803+001 | 3.2616409+000 | 3.1735959+001 | 5.1048679+002 |
| 10 1, 10                     | -2.3318793+001 | 3.2617432+000 | 3.1731419+001 | 5.1075833+002 |
| 10 1, 9                      | -7.0513291+000 | 9.2060424+000 | 1.4112982+002 | 3.0063473+003 |
| 10 2, 9                      | -7.0505283+000 | 9.2130100+000 | 1.4098484+002 | 3.0140680+003 |
| 10 2, 8                      | 7.2186427+000  | 1.3763003+001 | 3.1168912+002 | 8.5695090+003 |
| 10 3, 8                      | 7.2431053+000  | 1.3947006+001 | 3.1165712+002 | 8.6737485+003 |
| 10 3, 7                      | 1.9162838+001  | 1.5555373+001 | 4.5509809+002 | 1.5301715+004 |
| 10 4, 7                      | 1.9527579+001  | 1.7771277+001 | 4.9306882+002 | 1.6847400+004 |
| 10 4, 6                      | 2.7813170+001  | 1.3054159+001 | 4.2699784+002 | 1.6674211+004 |
| 10 5, 6                      | 3.0226856+001  | 2.2814662+001 | 7.2684058+002 | 2.8208463+004 |
| 10 5, 5                      | 3.3907580+001  | 1.5648439+001 | 4.9690342+002 | 2.0327641+004 |
| 10 6, 5                      | 4.0693703+001  | 3.1977922+001 | 1.2243104+003 | 5.3163891+004 |
| 10 6, 4                      | 4.1454669+001  | 2.8904980+001 | 1.0896305+003 | 4.7388321+004 |
| 10 7, 4                      | 5.2499143+001  | 4.5422701+001 | 2.2234187+003 | 1.1494984+005 |
| 10 7, 3                      | 5.2566634+001  | 4.5036848+001 | 2.2005759+003 | 1.1371233+005 |
| 10 8, 3                      | 6.6374531+001  | 6.1513135+001 | 3.8831180+003 | 2.4958290+005 |
| 10 8, 2                      | 6.6377605+001  | 6.1491566+001 | 3.8814294+003 | 2.4946582+005 |
| 10 9, 2                      | 8.2381947+001  | 7.9553888+001 | 6.3753522+003 | 5.1310219+005 |

TABLE II. -- EXPECTATION VALUES -- CONTINUED

KAPPA = -0.100000 -- CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 10 9, 1  | 8.2382019+001  | 7.9553298+001 | 6.3752928+003 | 5.1309697+005 |
| 10 10, 1 | 1.0045472+002  | 9.9524657+001 | 9.9225180+003 | 9.9035174+005 |
| 10 10, 0 | 1.0045472+002  | 9.9524651+001 | 9.9225172+003 | 9.9035165+005 |
| 11 0, 11 | -2.8839904+001 | 3.5981326+000 | 3.8627416+001 | 6.8617202+002 |
| 11 1, 11 | -2.8839901+001 | 3.5981582+000 | 3.8626013+001 | 6.8627488+002 |
| 11 1, 10 | -1.0836515+001 | 1.0227393+001 | 1.7391369+002 | 4.1168671+003 |
| 11 2, 10 | -1.0836309+001 | 1.0229378+001 | 1.7385656+002 | 4.1205158+003 |
| 11 2, 9  | 5.1946939+000  | 1.5574791+001 | 3.9259413+002 | 1.2097580+004 |
| 11 3, 9  | 5.2019762+000  | 1.5636745+001 | 3.9224854+002 | 1.2154172+004 |
| 11 3, 8  | 1.9060208+001  | 1.8845224+001 | 6.1528454+002 | 2.3332523+004 |
| 11 4, 8  | 1.9193520+001  | 1.9803283+001 | 6.2911729+002 | 2.4181171+004 |
| 11 4, 7  | 3.0037314+001  | 1.7414009+001 | 6.7160126+002 | 2.9722845+004 |
| 11 5, 7  | 3.1271278+001  | 2.4010227+001 | 8.7395499+002 | 3.8913868+004 |
| 11 5, 6  | 3.7466566+001  | 1.5600783+001 | 6.0081513+002 | 2.9139650+004 |
| 11 6, 6  | 4.2367490+001  | 3.1482892+001 | 1.3031079+003 | 6.3936401+004 |
| 11 6, 5  | 4.4314600+001  | 2.5051683+001 | 1.0128569+003 | 5.0408053+004 |
| 11 7, 5  | 5.4131788+001  | 4.3975732+001 | 2.2142696+003 | 1.2284322+005 |
| 11 7, 4  | 5.4396778+001  | 4.2552986+001 | 2.1296378+003 | 1.1805712+005 |
| 11 8, 4  | 6.7766973+001  | 6.0062443+001 | 3.8137773+003 | 2.5248273+005 |
| 11 8, 3  | 6.7784957+001  | 5.9939507+001 | 3.8041953+003 | 2.5180792+005 |
| 11 9, 3  | 8.3576031+001  | 7.8299212+001 | 6.2543660+003 | 5.0682401+005 |
| 11 9, 2  | 8.3576714+001  | 7.8293689+001 | 6.2538142+003 | 5.0677541+005 |
| 11 10, 2 | 1.0150833+002  | 9.8422005+001 | 9.7441410+003 | 9.6823918+005 |
| 11 10, 1 | 1.0150834+002  | 9.8421877+001 | 9.7441249+003 | 9.6823743+005 |
| 11 11, 1 | 1.2149754+002  | 1.2047993+002 | 1.4536535+004 | 1.7555845+006 |
| 11 11, 0 | 1.2149754+002  | 1.2047993+002 | 1.4536535+004 | 1.7555844+006 |
| 12 0, 12 | -3.4941730+001 | 3.9343998+000 | 4.6194866+001 | 8.9803388+002 |
| 12 1, 12 | -3.4941729+001 | 3.9344061+000 | 4.6194450+001 | 8.9807053+002 |
| 12 1, 11 | -1.5203586+001 | 1.1244242+001 | 2.1008925+002 | 5.4681448+003 |
| 12 2, 11 | -1.5203535+001 | 1.1244788+001 | 2.1006860+002 | 5.4697174+003 |
| 12 2, 10 | 2.5775659+000  | 1.7327211+001 | 4.8190281+002 | 1.6431866+004 |
| 12 3, 10 | 2.5796383+000  | 1.7346859+001 | 4.8166523+002 | 1.6460364+004 |
| 12 3, 9  | 1.8273498+001  | 2.1717094+001 | 7.8410279+002 | 3.3156556+004 |
| 12 4, 9  | 1.8318316+001  | 2.2086042+001 | 7.8800404+002 | 3.3587199+004 |
| 12 4, 8  | 3.1450700+001  | 2.2434771+001 | 9.7245866+002 | 4.8152690+004 |
| 12 5, 8  | 3.1987354+001  | 2.5999131+001 | 1.0782277+003 | 5.4005928+004 |
| 12 5, 7  | 4.1015885+001  | 1.8323741+001 | 8.5507600+002 | 4.7474871+004 |
| 12 6, 7  | 4.4089403+001  | 3.1804071+001 | 1.4592282+003 | 8.1152656+004 |
| 12 6, 6  | 4.8036791+001  | 2.1970695+001 | 9.9828051+002 | 5.7745556+004 |
| 12 7, 6  | 5.6061042+001  | 4.2668343+001 | 2.2572014+003 | 1.3747641+005 |
| 12 7, 5  | 5.6886365+001  | 3.8699073+001 | 2.0175416+003 | 1.2305470+005 |
| 12 8, 5  | 6.9475281+001  | 5.8343637+001 | 3.7677424+003 | 2.6232300+005 |
| 12 8, 4  | 6.9555991+001  | 5.7812792+001 | 3.7263717+003 | 2.5932247+005 |
| 12 9, 4  | 8.5033267+001  | 7.6761680+001 | 6.1476425+003 | 5.0874234+005 |
| 12 9, 3  | 8.5037730+001  | 7.6726296+001 | 6.1441257+003 | 5.0842937+005 |
| 12 10, 3 | 1.0278013+002  | 9.7086317+001 | 9.5760641+003 | 9.5570284+005 |
| 12 10, 2 | 1.0278028+002  | 9.7084987+001 | 9.5758988+003 | 9.5568480+005 |
| 12 11, 2 | 1.2263527+002  | 1.1928958+002 | 1.4299069+004 | 1.7194229+006 |
| 12 11, 1 | 1.2263527+002  | 1.1928955+002 | 1.4299065+004 | 1.7194224+006 |
| 12 12, 1 | 1.4454041+002  | 1.4343515+002 | 2.0598893+004 | 2.9607086+006 |
| 12 12, 0 | 1.4454041+002  | 1.4343515+002 | 2.0598893+004 | 2.9607086+006 |
| 13 0, 13 | -4.1624259+001 | 4.2705145+000 | 5.4437598+001 | 1.1494986+003 |
| 13 1, 13 | -4.1624259+001 | 4.2705160+000 | 5.4437479+001 | 1.1495110+003 |
| 13 1, 12 | -2.0152090+001 | 1.2258652+001 | 2.4964486+002 | 7.0843925+003 |
| 13 2, 12 | -2.0152077+001 | 1.2258798+001 | 2.4963787+002 | 7.0850215+003 |
| 13 2, 11 | -6.2641908-001 | 1.9052835+001 | 5.7987886+002 | 2.1661079+004 |
| 13 3, 11 | -6.2585007-001 | 1.9058779+001 | 5.7976171+002 | 2.1674393+004 |
| 13 3, 10 | 1.6856824+001  | 2.4348031+001 | 9.6540178+002 | 4.5017551+004 |
| 13 4, 10 | 1.6870996+001  | 2.4479025+001 | 9.6613136+002 | 4.5225688+004 |
| 13 4, 9  | 3.2042359+001  | 2.6972447+001 | 1.2886215+003 | 7.0783095+004 |
| 13 5, 9  | 3.2249177+001  | 2.8590016+001 | 1.3330538+003 | 7.3931822+004 |
| 13 5, 8  | 4.4052065+001  | 2.3704563+001 | 1.2792801+003 | 7.9334929+004 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.100000—CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 13 6, 8  | 4.5687537+001  | 3.3148583+001 | 1.7070342+003 | 1.0654809+005 |
| 13 6, 7  | 5.2321370+001  | 2.1409312+001 | 1.1428931+003 | 7.6151136+004 |
| 13 7, 7  | 5.8215533+001  | 4.1911071+001 | 2.3837822+003 | 1.6144130+005 |
| 13 7, 6  | 6.0274068+001  | 3.3692441+001 | 1.8739058+003 | 1.2832440+005 |
| 13 8, 6  | 7.1526177+001  | 5.6481432+001 | 3.7630325+003 | 2.8103123+005 |
| 13 8, 5  | 7.1818533+001  | 5.4672179+001 | 3.6211725+003 | 2.7027355+005 |
| 13 9, 5  | 8.6796314+001  | 7.4907480+001 | 6.0616246+003 | 5.2048461+005 |
| 13 9, 4  | 8.6818727+001  | 7.4734481+001 | 6.0444735+003 | 5.1892648+005 |
| 13 10, 4 | 1.0430474+002  | 9.5475475+001 | 9.4236590+003 | 9.5496318+005 |
| 13 10, 3 | 1.0430579+002  | 9.5466031+001 | 9.4224924+003 | 9.5483501+005 |
| 13 11, 3 | 1.2398642+002  | 1.1787181+002 | 1.4073289+004 | 1.6968143+006 |
| 13 11, 2 | 1.2398645+002  | 1.1787151+002 | 1.4073243+004 | 1.6968082+006 |
| 13 12, 2 | 1.4576263+002  | 1.4215669+002 | 2.0290505+004 | 2.9040908+006 |
| 13 12, 1 | 1.4576263+002  | 1.4215668+002 | 2.0290504+004 | 2.9040906+006 |
| 13 13, 1 | 1.6958331+002  | 1.6839033+002 | 2.8385051+004 | 4.7883191+006 |
| 13 13, 0 | 1.6958331+002  | 1.6839033+002 | 2.8385051+004 | 4.7883191+006 |
| 14 0,14  | -4.8887478+001 | 4.6065166+000 | 6.3355386+001 | 1.4439753+003 |
| 14 1,14  | -4.8887478+001 | 4.6065170+000 | 6.3355353+001 | 1.4439794+003 |
| 14 1,13  | -2.5681793+001 | 1.3271510+001 | 2.9257525+002 | 8.9896781+003 |
| 14 2,13  | -2.5681790+001 | 1.3271548+001 | 2.9257300+002 | 8.9899146+003 |
| 14 2,12  | -4.4146533+000 | 2.0765194+001 | 6.8658742+002 | 2.7873039+004 |
| 14 3,12  | -4.4145016+000 | 2.0766925+001 | 6.8653823+002 | 2.7878841+004 |
| 14 3,11  | 1.4835969+001  | 2.6862099+001 | 1.1617278+003 | 5.9175955+004 |
| 14 4,11  | 1.4840243+001  | 2.6905841+001 | 1.1617034+003 | 5.9272462+004 |
| 14 4,10  | 3.1905155+001  | 3.0887259+001 | 1.6134263+003 | 9.7435040+004 |
| 14 5,10  | 3.1978357+001  | 3.1539533+001 | 1.6291184+003 | 9.8964565+004 |
| 14 5, 9  | 4.6246144+001  | 3.0164754+001 | 1.8092876+003 | 1.2389751+005 |
| 14 6, 9  | 4.6990258+001  | 3.5497335+001 | 2.0484613+003 | 1.4155205+005 |
| 14 6, 8  | 5.6668377+001  | 2.4331754+001 | 1.5327358+003 | 1.1490746+005 |
| 14 7, 8  | 6.0461430+001  | 4.2121863+001 | 2.6265204+003 | 1.9801594+005 |
| 14 7, 7  | 6.4613465+001  | 2.9418620+001 | 1.8097864+003 | 1.4061974+005 |
| 14 8, 7  | 7.3909466+001  | 5.4780631+001 | 3.8313300+003 | 3.1167022+005 |
| 14 8, 6  | 7.4780959+001  | 4.9915992+001 | 3.4442878+003 | 2.8053097+005 |
| 14 9, 6  | 8.8906273+001  | 7.2753100+001 | 6.0075764+003 | 5.4394345+005 |
| 14 9, 5  | 8.8997801+001  | 7.2073333+001 | 5.9400893+003 | 5.3761147+005 |
| 14 10, 5 | 1.0612120+002  | 9.3543679+001 | 9.2922203+003 | 9.6808409+005 |
| 14 10, 4 | 1.0612701+002  | 9.3492385+001 | 9.2858904+003 | 9.6738018+005 |
| 14 11, 4 | 1.2558175+002  | 1.1618863+002 | 1.3865064+004 | 1.6907157+006 |
| 14 11, 3 | 1.2558199+002  | 1.1618626+002 | 1.3864707+004 | 1.6906681+006 |
| 14 12, 3 | 1.4719439+002  | 1.4065549+002 | 1.9995259+004 | 2.8661231+006 |
| 14 12, 2 | 1.4719439+002  | 1.4065542+002 | 1.9995246+004 | 2.8661212+006 |
| 14 13, 2 | 1.7089030+002  | 1.6702343+002 | 2.7992827+004 | 4.7028525+006 |
| 14 13, 1 | 1.7089030+002  | 1.6702343+002 | 2.7992827+004 | 4.7028525+006 |
| 14 14, 1 | 1.9662624+002  | 1.9534548+002 | 3.8194470+004 | 7.4727882+006 |
| 14 14, 0 | 1.9662624+002  | 1.9534548+002 | 3.8194470+004 | 7.4727882+006 |
| 15 0,15  | -5.6731376+001 | 4.9424319+000 | 7.2948164+001 | 1.7848651+003 |
| 15 1,15  | -5.6731376+001 | 4.9424320+000 | 7.2948155+001 | 1.7848664+003 |
| 15 1,14  | -3.1792555+001 | 1.4283266+001 | 3.3887868+002 | 1.1207933+004 |
| 15 2,14  | -3.1792554+001 | 1.4283276+001 | 3.3887798+002 | 1.1208017+004 |
| 15 2,13  | -8.7859244+000 | 2.2469967+001 | 8.0204065+002 | 3.5154615+004 |
| 15 3,13  | -8.7858849+000 | 2.2470456+001 | 8.0202198+002 | 3.5156992+004 |
| 15 3,12  | 1.2222052+001  | 2.9320376+001 | 1.3741836+003 | 7.5876028+004 |
| 15 4,12  | 1.2223293+001  | 2.9334287+001 | 1.3740751+003 | 7.5918921+004 |
| 15 4,11  | 3.1111633+001  | 3.4411899+001 | 1.9542273+003 | 1.2863779+005 |
| 15 5,11  | 3.1135968+001  | 3.4654036+001 | 1.9589438+003 | 1.2933663+005 |
| 15 5,10  | 4.7559176+001  | 3.6104847+001 | 2.3642703+003 | 1.7743146+005 |
| 15 6,10  | 4.7859127+001  | 3.8630707+001 | 2.4733246+003 | 1.8701650+005 |
| 15 6, 9  | 6.0533376+001  | 3.0679606+001 | 2.2030566+003 | 1.8234278+005 |
| 15 7, 9  | 6.2623851+001  | 4.3560788+001 | 3.0080999+003 | 2.5062869+005 |
| 15 7, 8  | 6.9617127+001  | 2.8123507+001 | 1.9857221+003 | 1.7414984+005 |
| 15 8, 8  | 7.6556795+001  | 5.3707042+001 | 4.0172042+003 | 3.5887859+005 |
| 15 8, 7  | 7.8692636+001  | 4.3677583+001 | 3.1990476+003 | 2.8828526+005 |
| 15 9, 7  | 9.1389961+001  | 7.0438905+001 | 6.0084709+003 | 5.8199681+005 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.100000—CONTINUED

|          |               |               |               |               |
|----------|---------------|---------------|---------------|---------------|
| 15 9, 6  | 9.1702709+001 | 6.8248792+001 | 5.7895525+003 | 5.6052435+005 |
| 15 10, 6 | 1.0827187+002 | 9.1257110+001 | 9.1884653+003 | 9.9707249+005 |
| 15 10, 5 | 1.0829813+002 | 9.1031504+001 | 9.1607294+003 | 9.9390547+005 |
| 15 11, 5 | 1.2745597+002 | 1.1419512+002 | 1.3679657+004 | 1.7038451+006 |
| 15 11, 4 | 1.2745740+002 | 1.1418096+002 | 1.3677537+004 | 1.7035600+006 |
| 15 12, 4 | 1.4886326+002 | 1.3889770+002 | 1.9719639+004 | 2.8506643+006 |
| 15 12, 3 | 1.4886331+002 | 1.3889713+002 | 1.9719536+004 | 2.8506480+006 |
| 15 13, 3 | 1.7240362+002 | 1.6543766+002 | 2.7615248+004 | 4.6424416+006 |
| 15 13, 2 | 1.7240362+002 | 1.6543765+002 | 2.7615245+004 | 4.6424410+006 |
| 15 14, 2 | 1.9801821+002 | 1.9388988+002 | 3.7704414+004 | 7.3477212+006 |
| 15 14, 1 | 1.9801821+002 | 1.9388988+002 | 3.7704414+004 | 7.3477212+006 |
| 15 15, 1 | 2.2566918+002 | 2.2430060+002 | 5.0350610+004 | 1.1309249+007 |
| 15 15, 0 | 2.2566918+002 | 2.2430060+002 | 5.0350610+004 | 1.1309249+007 |

KAPPA = - 0.200000

|        |                |               |               |               |
|--------|----------------|---------------|---------------|---------------|
| 2 0, 2 | -1.7944947-001 | 1.6467413-001 | 6.5869652-001 | 2.6347861+000 |
| 2 1, 2 | 2.5000000-001  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 1, 1 | 1.7500000+000  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 2, 1 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 2 2, 0 | 4.1794495+000  | 3.8353259+000 | 1.5341303+001 | 6.1365214+001 |
| 3 0, 3 | -7.8388218-001 | 5.6315758-001 | 2.2526303+000 | 9.0105213+000 |
| 3 1, 3 | -5.9767986-001 | 1.0805993+000 | 1.8059926+000 | 8.3345330+000 |
| 3 1, 2 | 2.3588350+000  | 1.1665091+000 | 2.6650914+000 | 1.6152332+001 |
| 3 2, 2 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 3 2, 1 | 4.7838822+000  | 3.4368424+000 | 1.3747370+001 | 5.4989479+001 |
| 3 3, 1 | 9.0976799+000  | 8.9194007+000 | 8.0194007+001 | 7.2166547+002 |
| 3 3, 0 | 9.1411650+000  | 8.8334909+000 | 7.9334909+001 | 7.1384767+002 |
| 4 0, 4 | -1.9291600+000 | 1.0146002+000 | 4.3178778+000 | 2.1423141+001 |
| 4 1, 4 | -1.8624861+000 | 1.2583426+000 | 3.5834261+000 | 2.4509178+001 |
| 4 1, 3 | 2.8588350+000  | 1.7562770+000 | 8.5627696+000 | 6.9821204+001 |
| 4 2, 3 | 3.8558971+000  | 4.1407231+000 | 1.8814462+001 | 1.1128296+002 |
| 4 2, 2 | 5.7764053+000  | 3.1522819+000 | 1.4983475+001 | 9.7923455+001 |
| 4 3, 2 | 9.3624861+000  | 8.7416574+000 | 7.8416574+001 | 7.0549082+002 |
| 4 3, 1 | 9.6411650+000  | 8.2437230+000 | 7.3437230+001 | 6.6017880+002 |
| 4 4, 1 | 1.6144103+001  | 1.5859277+001 | 2.5318554+002 | 4.0487170+003 |
| 4 4, 0 | 1.6152755+001  | 1.5833118+001 | 2.5269865+002 | 4.0406534+003 |
| 5 0, 5 | -3.6118742+000 | 1.4129349+000 | 6.7638932+000 | 4.4850030+001 |
| 5 1, 5 | -3.5905275+000 | 1.5094364+000 | 6.1776404+000 | 5.0273375+001 |
| 5 1, 4 | 2.9707999+000  | 2.8828501+000 | 2.0343333+001 | 1.9035849+002 |
| 5 2, 4 | 3.4616516+000  | 4.4940224+000 | 2.5880448+001 | 2.2999152+002 |
| 5 2, 3 | 7.0000000+000  | 3.2941176+000 | 2.3058824+001 | 2.5035294+002 |
| 5 3, 3 | 9.6625439+000  | 8.6723412+000 | 8.1974015+001 | 8.4795417+002 |
| 5 3, 2 | 1.0599666+001  | 7.3052264+000 | 6.7996553+001 | 7.1282571+002 |
| 5 4, 2 | 1.6538348+001  | 1.5505978+001 | 2.4611955+002 | 3.9300085+003 |
| 5 4, 1 | 1.6611874+001  | 1.5292947+001 | 2.4217728+002 | 3.8647970+003 |
| 5 5, 1 | 2.5177984+001  | 2.4818222+001 | 6.1884834+002 | 1.5456772+004 |
| 5 5, 0 | 2.5179534+001  | 2.4811924+001 | 6.1866011+002 | 1.5451816+004 |
| 6 0, 6 | -5.8113078+000 | 1.7663914+000 | 9.7561642+000 | 8.2825446+001 |
| 6 1, 6 | -5.8049244+000 | 1.8007083+000 | 9.4115713+000 | 8.8021553+001 |
| 6 1, 5 | 2.5158598+000  | 4.2230512+000 | 3.6204394+001 | 3.9838352+002 |
| 6 2, 5 | 2.7175592+000  | 5.0758974+000 | 3.7729526+001 | 4.3734993+002 |
| 6 2, 4 | 8.1985624+000  | 4.1846736+000 | 4.4309051+001 | 6.3547090+002 |
| 6 3, 4 | 9.9061845+000  | 8.8497083+000 | 9.4513292+001 | 1.2408908+003 |
| 6 3, 3 | 1.2069082+001  | 6.4921255+000 | 6.9641443+001 | 9.8098998+002 |
| 6 4, 3 | 1.7072897+001  | 1.5140196+001 | 2.4544153+002 | 4.1788124+003 |
| 6 4, 2 | 1.7402941+001  | 1.4266356+001 | 2.2916403+002 | 3.9001006+003 |
| 6 5, 2 | 2.5648740+001  | 2.4349583+001 | 6.0307514+002 | 1.5026088+004 |
| 6 5, 1 | 2.5665058+001  | 2.4284823+001 | 6.0115416+002 | 1.4975627+004 |
| 6 6, 1 | 3.6209544+001  | 3.5783907+001 | 1.2848289+003 | 4.6199838+004 |
| 6 6, 0 | 3.6209804+001  | 3.5782579+001 | 1.2847708+003 | 4.6197603+004 |

TABLE II.--EXPECTATION VALUES--CONTINUED

| KAPPA = -0.200000 --CONTINUED |                |               |               |               |
|-------------------------------|----------------|---------------|---------------|---------------|
| 7 0, 7                        | -8.5168254+000 | 2.0980941+000 | 1.3379765+001 | 1.3754674+002 |
| 7 1, 7                        | -8.5150019+000 | 2.1094484+000 | 1.3210518+001 | 1.4124930+002 |
| 7 1, 6                        | 1.4759975+000  | 5.4635121+000 | 5.4262268+001 | 7.1170433+002 |
| 7 2, 6                        | 1.5492370+000  | 5.8401381+000 | 5.3973624+001 | 7.4785469+002 |
| 7 2, 5                        | 9.0589886+000  | 5.9985477+000 | 8.4069949+001 | 1.4270852+003 |
| 7 3, 5                        | 9.9769224+000  | 9.3786102+000 | 1.1902560+002 | 1.9769003+003 |
| 7 3, 4                        | 1.3894903+001  | 6.3707148+000 | 8.8236147+001 | 1.6813999+003 |
| 7 4, 4                        | 1.7708106+001  | 1.4923092+001 | 2.5726742+002 | 5.0112712+003 |
| 7 4, 3                        | 1.8711918+001  | 1.2682964+001 | 2.1450352+002 | 4.2217612+003 |
| 7 5, 3                        | 2.6297226+001  | 2.3760742+001 | 5.9306993+002 | 1.5285792+004 |
| 7 5, 2                        | 2.6388204+001  | 2.3414830+001 | 5.8282314+002 | 1.5011656+004 |
| 7 6, 2                        | 3.6742657+001  | 3.5236770+001 | 1.2567590+003 | 4.5056874+004 |
| 7 6, 1                        | 3.6745918+001  | 3.5220394+001 | 1.2560468+003 | 4.5029607+004 |
| 7 7, 1                        | 4.9240854+001  | 4.8751200+001 | 2.3826940+003 | 1.1660006+005 |
| 7 7, 0                        | 4.9240896+001  | 4.8750943+001 | 2.3826784+003 | 1.1659924+005 |
| 8 0, 8                        | -1.1724455+001 | 2.4209661+000 | 1.7642825+001 | 2.1122726+002 |
| 8 1, 8                        | -1.1723951+001 | 2.4245323+000 | 1.7569130+001 | 2.1341583+002 |
| 8 1, 7                        | -1.1177089-001 | 6.5680839+000 | 7.4541602+001 | 1.1496308+003 |
| 8 2, 7                        | -8.7248305-002 | 6.7158863+000 | 7.3915506+001 | 1.1788345+003 |
| 8 2, 6                        | 9.3415508+000  | 8.3251349+000 | 1.3868472+002 | 2.7247242+003 |
| 8 3, 6                        | 9.7578701+000  | 1.0286419+001 | 1.5681319+002 | 3.1400498+003 |
| 8 3, 5                        | 1.5795318+001  | 7.3742346+000 | 1.3674965+002 | 3.2429588+003 |
| 8 4, 5                        | 1.8357259+001  | 1.5045019+001 | 2.8834111+002 | 6.6787692+003 |
| 8 4, 4                        | 2.0631344+001  | 1.1120431+001 | 2.1050524+002 | 5.0987261+003 |
| 8 5, 4                        | 2.7131957+001  | 2.3150904+001 | 5.9568978+002 | 1.6606960+004 |
| 8 5, 3                        | 2.7481722+001  | 2.1923221+001 | 5.5900184+002 | 1.5579460+004 |
| 8 6, 3                        | 3.7457756+001  | 3.4520357+001 | 1.2337212+003 | 4.5105833+004 |
| 8 6, 2                        | 3.7479321+001  | 3.4414778+001 | 1.2291488+003 | 4.4929018+004 |
| 8 7, 2                        | 4.9834123+001  | 4.8138144+001 | 2.3379279+003 | 1.1404357+005 |
| 8 7, 1                        | 4.9834731+001  | 4.8134460+001 | 2.3377069+003 | 1.1403195+005 |
| 8 8, 1                        | 6.4272233+001  | 6.3718737+001 | 4.0680222+003 | 2.5999656+005 |
| 8 8, 0                        | 6.4272239+001  | 6.3718690+001 | 4.0680184+003 | 2.5999630+005 |
| 9 0, 9                        | -1.5432857+001 | 2.7404483+000 | 2.2531316+001 | 3.0647009+002 |
| 9 1, 9                        | -1.5432721+001 | 2.7415250+000 | 2.2501904+001 | 3.0760429+002 |
| 9 1, 8                        | -2.2205924+000 | 7.5922877+000 | 9.7521016+001 | 1.7306221+003 |
| 9 2, 8                        | -2.2128320+000 | 7.6458063+000 | 9.7060142+001 | 1.7508721+003 |
| 9 2, 7                        | 8.9879664+000  | 1.0568142+001 | 2.0035594+002 | 4.5282934+003 |
| 9 3, 7                        | 9.1539328+000  | 1.1513184+001 | 2.0720301+002 | 4.8017623+003 |
| 9 3, 6                        | 1.7425792+001  | 9.7594167+000 | 2.2767793+002 | 6.2949173+003 |
| 9 4, 6                        | 1.8901087+001  | 1.5655647+001 | 3.4435976+002 | 9.4565467+003 |
| 9 4, 5                        | 2.3034037+001  | 1.0458724+001 | 2.3875903+002 | 7.1784693+003 |
| 9 5, 5                        | 2.8121149+001  | 2.2714513+001 | 6.2075091+002 | 1.9463162+004 |
| 9 5, 4                        | 2.9132528+001  | 1.9645141+001 | 5.2690588+002 | 1.6634226+004 |
| 9 6, 4                        | 3.8385718+001  | 3.3656062+001 | 1.2213637+003 | 4.6865947+004 |
| 9 6, 3                        | 3.8484720+001  | 3.3190965+001 | 1.2011978+003 | 4.6064316+004 |
| 9 7, 3                        | 5.0603943+001  | 4.7344532+001 | 2.2981349+003 | 1.1345816+005 |
| 9 7, 2                        | 5.0608575+001  | 4.7316916+001 | 2.2964867+003 | 1.1337099+005 |
| 9 8, 2                        | 6.4926026+001  | 6.3042484+001 | 4.0012164+003 | 2.5488663+005 |
| 9 8, 1                        | 6.4926134+001  | 6.3041721+001 | 4.0011559+003 | 2.5488245+005 |
| 9 9, 1                        | 8.1303696+001  | 8.0686246+001 | 6.5204093+003 | 5.2741431+005 |
| 9 9, 0                        | 8.1303697+001  | 8.0686238+001 | 6.5204085+003 | 5.2741424+005 |
| 10 0,10                       | -1.9641588+001 | 3.0585922+000 | 2.8032589+001 | 4.2612419+002 |
| 10 1,10                       | -1.9641552+001 | 3.0589073+000 | 2.8021602+001 | 4.2665680+002 |
| 10 1, 9                       | -4.8381245+000 | 8.5787510+000 | 1.2345153+002 | 2.4730312+003 |
| 10 2, 9                       | -4.8357692+000 | 8.5970215+000 | 1.2319782+002 | 2.4853067+003 |
| 10 2, 8                       | 8.0419181+000  | 1.2550746+001 | 2.6671449+002 | 6.8586637+003 |
| 10 3, 8                       | 8.1024629+000  | 1.2951752+001 | 2.6844329+002 | 7.0258831+003 |
| 10 3, 7                       | 1.8487949+001  | 1.3106973+001 | 3.5686803+002 | 1.1217091+004 |
| 10 4, 7                       | 1.9211968+001  | 1.6807705+001 | 4.2820236+002 | 1.3612789+004 |
| 10 4, 6                       | 2.5626313+001  | 1.1327435+001 | 3.2393218+002 | 1.1634079+004 |
| 10 5, 6                       | 2.9185192+001  | 2.2692628+001 | 6.7959349+002 | 2.4442984+004 |
| 10 5, 5                       | 3.1471729+001  | 1.7160275+001 | 5.0424498+002 | 1.8663614+004 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.200000—CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 10 6, 5  | 3.9538636+001  | 3.2753612+001 | 1.2292683+003 | 5.1009307+004 |
| 10 6, 4  | 3.9887264+001  | 3.1228072+001 | 1.1625016+003 | 4.8224102+004 |
| 10 7, 4  | 5.1585248+001  | 4.6349861+001 | 2.2676010+003 | 1.1553414+005 |
| 10 7, 3  | 5.1609778+001  | 4.6207298+001 | 2.2591098+003 | 1.1507726+005 |
| 10 8, 3  | 6.5749941+001  | 6.2187963+001 | 3.9398729+003 | 2.5290016+005 |
| 10 8, 2  | 6.5750869+001  | 6.2181458+001 | 3.9393607+003 | 2.5286461+005 |
| 10 9, 2  | 8.2018649+001  | 7.9946852+001 | 6.4253407+003 | 5.1801533+005 |
| 10 9, 1  | 8.2018668+001  | 7.9946704+001 | 6.4253256+003 | 5.1801401+005 |
| 10 10, 1 | 1.0033522+002  | 9.9653697+001 | 9.9434586+003 | 9.9295244+005 |
| 10 10, 0 | 1.0033522+002  | 9.9653696+001 | 9.9434584+003 | 9.9295242+005 |
| 11 0,11  | -2.4350489+001 | 3.3761451+000 | 3.4139416+001 | 5.7311165+002 |
| 11 1,11  | -2.4350479+001 | 3.3762351+000 | 3.4135522+001 | 5.7334321+002 |
| 11 1,10  | -7.9594515+000 | 9.5486533+000 | 1.5240190+002 | 3.3960950+003 |
| 11 2,10  | -7.9587595+000 | 9.5546140+000 | 1.5228235+002 | 3.4027548+003 |
| 11 2, 9  | 6.5491615+000  | 1.4346712+001 | 3.3883657+002 | 9.7787005+003 |
| 11 3, 9  | 6.5699034+000  | 1.4502704+001 | 3.3890727+002 | 9.8758296+003 |
| 11 3, 8  | 1.8867023+001  | 1.6515031+001 | 5.0467074+002 | 1.7856968+004 |
| 11 4, 8  | 1.9178421+001  | 1.8439231+001 | 5.3908310+002 | 1.9371280+004 |
| 11 4, 7  | 2.8036185+001  | 1.4092274+001 | 4.9038168+002 | 2.0179308+004 |
| 11 5, 7  | 3.0206122+001  | 2.3288753+001 | 7.8233301+002 | 3.2223281+004 |
| 11 5, 6  | 3.4417368+001  | 1.5666659+001 | 5.3196622+002 | 2.3293340+004 |
| 11 6, 6  | 4.0892280+001  | 3.2032967+001 | 1.2718690+003 | 5.8454580+004 |
| 11 6, 5  | 4.1871534+001  | 2.8249937+001 | 1.1028800+003 | 5.0908400+004 |
| 11 7, 5  | 5.2809355+001  | 4.5176922+001 | 2.2533570+003 | 1.2108380+005 |
| 11 7, 4  | 5.2909786+001  | 4.4615691+001 | 2.2198422+003 | 1.1922243+005 |
| 11 8, 4  | 6.6776214+001  | 6.1122441+001 | 3.8876839+003 | 2.5497646+005 |
| 11 8, 3  | 6.6781761+001  | 6.1084213+001 | 3.8846841+003 | 2.5476593+005 |
| 11 9, 3  | 8.2898303+001  | 7.9034285+001 | 6.3364914+003 | 5.1335736+005 |
| 11 9, 2  | 8.2898479+001  | 7.9032866+001 | 6.3363488+003 | 5.1334478+005 |
| 11 10, 2 | 1.0111184+002  | 9.8850747+001 | 9.8130817+003 | 9.7675492+005 |
| 11 10, 1 | 1.0111185+002  | 9.8850719+001 | 9.8130782+003 | 9.7675455+005 |
| 11 11, 1 | 1.2136680+002  | 1.2062110+002 | 1.4564776+004 | 1.7598924+006 |
| 11 11, 0 | 1.2136680+002  | 1.2062110+002 | 1.4564776+004 | 1.7598924+006 |
| 12 0,12  | -2.9559495+001 | 3.6933878+000 | 4.0848418+001 | 7.5034672+002 |
| 12 1,12  | -2.9559493+001 | 3.6934130+000 | 4.0847094+001 | 7.5044135+002 |
| 12 1,11  | -1.1582663+001 | 1.0511098+001 | 1.8437413+002 | 4.5198026+003 |
| 12 2,11  | -1.1582465+001 | 1.0512973+001 | 1.8432327+002 | 4.5231025+003 |
| 12 2,10  | 4.5347306+000  | 1.6044324+001 | 4.1787383+002 | 1.3363730+004 |
| 12 3,10  | 4.5415090+000  | 1.6101268+001 | 4.1762807+002 | 1.3417258+004 |
| 12 3, 9  | 1.8598698+001  | 1.9538994+001 | 6.6004437+002 | 2.6049765+004 |
| 12 4, 9  | 1.8720522+001  | 2.0412107+001 | 6.7360312+002 | 2.6900473+004 |
| 12 4, 8  | 2.9911216+001  | 1.8407742+001 | 7.3785067+002 | 3.4019032+004 |
| 12 5, 8  | 3.1049769+001  | 2.4595099+001 | 9.3482858+002 | 4.3482813+004 |
| 12 5, 7  | 3.7680398+001  | 1.6101750+001 | 6.5546012+002 | 3.3315679+004 |
| 12 6, 7  | 4.2375348+001  | 3.1782619+001 | 1.3668405+003 | 7.0417265+004 |
| 12 6, 6  | 4.4601226+001  | 2.4735189+001 | 1.0417710+003 | 5.4682606+004 |
| 12 7, 6  | 5.4291747+001  | 4.3940123+001 | 2.2678613+003 | 1.3121019+005 |
| 12 7, 5  | 5.4625928+001  | 4.2187389+001 | 2.1622201+003 | 1.2505846+005 |
| 12 8, 5  | 6.8039344+001  | 5.9824410+001 | 3.8494771+003 | 2.6209692+005 |
| 12 8, 4  | 6.8065039+001  | 5.9651757+001 | 3.8359365+003 | 2.6112603+005 |
| 12 9, 4  | 8.3971014+001  | 7.7915898+001 | 6.2575875+003 | 5.1473383+005 |
| 12 9, 3  | 8.3972185+001  | 7.7906575+001 | 6.2566545+003 | 5.1465092+005 |
| 12 10, 3 | 1.0204885+002  | 9.7879424+001 | 9.6897888+003 | 9.6748019+005 |
| 12 10, 2 | 1.0204888+002  | 9.7879132+001 | 9.6897524+003 | 9.6747621+005 |
| 12 11, 2 | 1.2220545+002  | 1.1975420+002 | 1.4391247+004 | 1.7334115+006 |
| 12 11, 1 | 1.2220545+002  | 1.1975419+002 | 1.4391247+004 | 1.7334114+006 |
| 12 12, 1 | 1.4439840+002  | 1.4358847+002 | 2.0635967+004 | 2.9675260+006 |
| 12 12, 0 | 1.4439840+002  | 1.4358847+002 | 2.0635967+004 | 2.9675260+006 |
| 13 0,13  | -3.5268576+001 | 4.0104373+000 | 4.8158192+001 | 9.6071796+002 |
| 13 1,13  | -3.5268576+001 | 4.0104442+000 | 4.8157758+001 | 9.6075470+002 |
| 13 1,12  | -1.5706973+001 | 1.1469827+001 | 2.1935774+002 | 5.8644267+003 |
| 13 2,12  | -1.5706917+001 | 1.1470400+001 | 2.1933764+002 | 5.8659443+003 |



TABLE II.—EXPECTATION VALUES—CONTINUED

| KAPPA = -0.200000—CONTINUED |                |               |               |               |
|-----------------------------|----------------|---------------|---------------|---------------|
| 13 2,11                     | 2.0099009+000  | 1.7694794+001 | 5.0439525+002 | 1.7689666+004 |
| 13 3,11                     | 2.0120353+000  | 1.7714583+001 | 5.0419759+002 | 1.7717536+004 |
| 13 3,10                     | 1.7746744+001  | 2.2219925+001 | 8.2352021+002 | 3.5889959+004 |
| 13 4,10                     | 1.7791282+001  | 2.2580776+001 | 8.2793088+002 | 3.6336465+004 |
| 13 4, 9                     | 3.1068557+001  | 2.3111961+001 | 1.0295557+003 | 5.2639951+004 |
| 13 5, 9                     | 3.1591382+001  | 2.6561632+001 | 1.1368199+003 | 5.8781951+004 |
| 13 5, 8                     | 4.0867261+001  | 1.8986276+001 | 9.1751738+002 | 5.2646902+004 |
| 13 6, 8                     | 4.3873955+001  | 3.2266064+001 | 1.5309915+003 | 8.8350156+004 |
| 13 6, 7                     | 4.8050726+001  | 2.2133345+001 | 1.0460867+003 | 6.2972566+004 |
| 13 7, 7                     | 5.6015492+001  | 4.2877257+001 | 2.3309563+003 | 1.4752968+005 |
| 13 7, 6                     | 5.6937255+001  | 3.8535132+001 | 2.0644571+003 | 1.3101485+005 |
| 13 8, 6                     | 6.9571162+001  | 5.8315114+001 | 3.8334481+003 | 2.7542856+005 |
| 13 8, 5                     | 6.9668639+001  | 5.7683934+001 | 3.7837755+003 | 5.7174715+005 |
| 13 9, 5                     | 8.5268585+001  | 7.6557373+001 | 6.1925156+003 | 5.2341096+005 |
| 13 9, 4                     | 8.5274624+001  | 7.6510187+001 | 6.1878034+003 | 5.2298590+005 |
| 13 10, 4                    | 1.0317115+002  | 9.6710335+001 | 9.5776371+003 | 9.6688678+005 |
| 13 10, 3                    | 1.0317139+002  | 9.6708220+001 | 9.5773740+003 | 9.6685788+005 |
| 13 11, 3                    | 1.2320105+002  | 1.1872291+002 | 1.4225714+004 | 1.7167101+006 |
| 13 11, 2                    | 1.2320106+002  | 1.1872285+002 | 1.4225705+004 | 1.7167090+006 |
| 13 12, 2                    | 1.4529937+002  | 1.4265731+002 | 2.0410655+004 | 2.9260761+006 |
| 13 12, 1                    | 1.4529937+002  | 1.4265731+002 | 2.0410655+004 | 2.9260761+006 |
| 13 13, 1                    | 1.6943003+002  | 1.6855581+002 | 2.8432639+004 | 4.7987040+006 |
| 13 13, 0                    | 1.6943003+002  | 1.6855581+002 | 2.8432639+004 | 4.7987040+006 |
| 14 0,14                     | -4.1477713+001 | 4.3273510+000 | 5.6068209+001 | 1.2070935+003 |
| 14 1,14                     | -4.1477712+001 | 4.3273529+000 | 5.6068071+001 | 1.2071072+003 |
| 14 1,13                     | -2.0332013+001 | 1.2426419+001 | 2.5734490+002 | 7.4502254+003 |
| 14 2,13                     | -2.0331997+001 | 1.2426590+001 | 2.5733740+002 | 7.4508813+003 |
| 14 2,12                     | -1.0204838+000 | 1.9322473+001 | 5.9860891+002 | 2.2831305+004 |
| 14 3,12                     | -1.0198316+000 | 1.9329083+001 | 5.9849945+002 | 2.2845005+004 |
| 14 3,11                     | 1.6352580+001  | 2.4699666+001 | 9.9819742+002 | 4.7588201+004 |
| 14 4,11                     | 1.6368053+001  | 2.4839044+001 | 9.9931051+002 | 4.7812608+004 |
| 14 4,10                     | 3.1517724+001  | 2.7364705+001 | 1.3339857+003 | 7.5042324+004 |
| 14 5,10                     | 3.1734926+001  | 2.9028244+001 | 1.3828340+003 | 7.8495977+004 |
| 14 5, 9                     | 4.3577885+001  | 2.4119183+001 | 1.3294542+003 | 8.4497455+004 |
| 14 6, 9                     | 4.5250662+001  | 3.3628377+001 | 1.7753170+003 | 1.1374146+005 |
| 14 6, 8                     | 5.1954109+001  | 2.1798087+001 | 1.1961721+003 | 8.1828237+004 |
| 14 7, 8                     | 5.7918298+001  | 4.2318902+001 | 2.4684638+003 | 1.7230953+005 |
| 14 7, 7                     | 6.0031630+001  | 3.3953510+001 | 1.9403942+003 | 1.3712798+005 |
| 14 8, 7                     | 7.1390323+001  | 5.6708611+001 | 3.8549000+003 | 2.9664360+005 |
| 14 8, 6                     | 7.1702072+001  | 5.4801841+001 | 3.704982+003  | 2.8490270+005 |
| 14 9, 6                     | 8.6825118+001  | 7.4935036+001 | 6.1463478+003 | 5.4068289+005 |
| 14 9, 5                     | 8.6850672+001  | 7.4740293+001 | 6.1268910+003 | 5.3888579+005 |
| 14 10, 5                    | 1.0450681+002  | 9.5309251+001 | 9.4804622+003 | 9.7666754+005 |
| 14 10, 4                    | 1.0450814+002  | 9.5297428+001 | 9.4789961+003 | 9.7650475+005 |
| 14 11, 4                    | 1.2437569+002  | 1.1750122+002 | 1.4072664+004 | 1.7121252+006 |
| 14 11, 3                    | 1.2437574+002  | 1.1750076+002 | 1.4072596+004 | 1.7121160+006 |
| 14 12, 3                    | 1.4635447+002  | 1.4156500+002 | 2.0194275+004 | 2.8980604+006 |
| 14 12, 2                    | 1.4635447+002  | 1.4156499+002 | 2.0194273+004 | 2.8980600+006 |
| 14 13, 2                    | 1.7039351+002  | 1.6756016+002 | 2.8146123+004 | 4.7361493+006 |
| 14 13, 1                    | 1.7039351+002  | 1.6756016+002 | 2.8146123+004 | 4.7361493+006 |
| 14 14, 1                    | 1.9646168+002  | 1.9552312+002 | 3.8254398+004 | 7.4881035+006 |
| 14 14, 0                    | 1.9646168+002  | 1.9552312+002 | 3.8254398+004 | 7.4881035+006 |
| 15 0,15                     | -4.8186892+001 | 4.6441623+000 | 6.4578284+001 | 1.4923297+003 |
| 15 1,15                     | -4.8186892+001 | 4.6441628+000 | 6.4578241+001 | 1.4923346+003 |
| 15 1,14                     | -2.5457583+001 | 1.3381606+001 | 2.9833180+002 | 9.2973486+003 |
| 15 2,14                     | -2.5457579+001 | 1.3381656+001 | 2.9832913+002 | 9.2976176+003 |
| 15 2,13                     | -4.5542582+000 | 2.0938202+001 | 7.0057650+002 | 2.8862378+004 |
| 15 3,13                     | -4.5540638+000 | 2.0940339+001 | 7.0052516+002 | 2.8868754+004 |
| 15 3,12                     | 1.4436897+001  | 2.7076155+001 | 1.1861409+003 | 6.1365232+004 |
| 15 4,12                     | 1.4442060+001  | 2.7127251+001 | 1.1862857+003 | 6.1474164+004 |
| 15 4,11                     | 3.1335342+001  | 3.1077416+001 | 1.6461779+003 | 1.0108597+005 |
| 15 5,11                     | 3.1419288+001  | 3.1802861+001 | 1.6655086+003 | 1.0285857+005 |
| 15 5,10                     | 4.5555555+001  | 3.0185525+001 | 1.8363068+003 | 1.2800008+005 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.200000 --CONTINUED

|          |               |               |               |               |
|----------|---------------|---------------|---------------|---------------|
| 15 6, 10 | 4.6370120+001 | 3.5846979+001 | 2.1014416+003 | 1.4782301+005 |
| 15 6, 9  | 5.5904725+001 | 2.4483441+001 | 1.5633615+003 | 1.1926102+005 |
| 15 7, 9  | 5.9892458+001 | 4.2591500+001 | 2.7066353+003 | 2.0836321+005 |
| 15 7, 8  | 6.3943860+001 | 3.0013845+001 | 1.8846406+003 | 1.4944525+005 |
| 15 8, 8  | 7.3486860+001 | 5.5252950+001 | 3.9396337+003 | 3.2836331+005 |
| 15 8, 7  | 7.4336345+001 | 5.0519739+001 | 3.5577053+003 | 2.9701517+005 |
| 15 9, 7  | 8.8672960+001 | 7.3066308+001 | 6.1281199+003 | 5.6811148+005 |
| 15 9, 6  | 8.8764743+001 | 7.2390810+001 | 6.0603652+003 | 5.6164257+005 |
| 15 10, 6 | 1.0608716+002 | 9.3639925+001 | 9.4020672+003 | 9.9842438+005 |
| 15 10, 5 | 1.0609335+002 | 9.3585894+001 | 9.3953747+003 | 9.9766828+005 |
| 15 11, 5 | 1.2575410+002 | 1.1605836+002 | 1.3936283+004 | 1.7219131+006 |
| 15 11, 4 | 1.2575438+002 | 1.1605559+002 | 1.3935865+004 | 1.7218570+006 |
| 15 12, 4 | 1.4758356+002 | 1.4028842+002 | 1.9991772+004 | 2.8865119+006 |
| 15 12, 3 | 1.4758356+002 | 1.4028832+002 | 1.9991756+004 | 2.8865092+006 |
| 15 13, 3 | 1.7150880+002 | 1.6640604+002 | 2.7869499+004 | 4.6916154+006 |
| 15 13, 2 | 1.7150880+002 | 1.6640604+002 | 2.7869499+004 | 4.6916154+006 |
| 15 14, 2 | 1.9748782+002 | 1.9446282+002 | 3.7896470+004 | 7.3965856+006 |
| 15 14, 1 | 1.9748782+002 | 1.9446282+002 | 3.7896470+004 | 7.3965856+006 |
| 15 15, 1 | 2.2549335+002 | 2.2449042+002 | 5.0424851+004 | 1.1331217+007 |
| 15 15, 0 | 2.2549335+002 | 2.2449042+002 | 5.0424851+004 | 1.1331217+007 |

KAPPA = -0.300000

|        |                |               |               |               |
|--------|----------------|---------------|---------------|---------------|
| 2 0, 2 | -1.3071465-001 | 1.2269559-001 | 4.9078236-001 | 1.9631295+000 |
| 2 1, 2 | 3.6363636-001  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 1, 1 | 1.6363636+000  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 2, 1 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 2 2, 0 | 4.1307146+000  | 3.8773044+000 | 1.5509218+001 | 6.2036871+001 |
| 3 0, 3 | -5.8838261-001 | 4.5463341-001 | 1.8185336+000 | 7.2741346+000 |
| 3 1, 3 | -3.4495142-001 | 1.0613553+000 | 1.6135525+000 | 6.5833278+000 |
| 3 1, 2 | 2.1738529+000  | 1.1142228+000 | 2.1422277+000 | 1.1394272+001 |
| 3 2, 2 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 3 2, 1 | 4.5883826+000  | 3.5453666+000 | 1.4181466+001 | 5.6725865+001 |
| 3 3, 1 | 9.0722241+000  | 8.9386447+000 | 8.0386447+001 | 7.2341667+002 |
| 3 3, 0 | 9.0988744+000  | 8.8857772+000 | 7.9857772+001 | 7.1860573+002 |
| 4 0, 4 | -1.4938167+000 | 8.7747304-001 | 3.6804764+000 | 1.7451252+001 |
| 4 1, 4 | -1.3939394+000 | 1.2045455+000 | 3.0454545+000 | 1.9613636+001 |
| 4 1, 3 | 2.6731664+000  | 1.5290671+000 | 6.2906711+000 | 4.9145107+001 |
| 4 2, 3 | 3.8959135+000  | 4.1023116+000 | 1.8046232+001 | 9.8376691+001 |
| 4 2, 2 | 5.3852611+000  | 3.2383243+000 | 1.4616964+001 | 8.5086533+001 |
| 4 3, 2 | 9.2727273+000  | 8.7954545+000 | 7.8954545+001 | 7.1038636+002 |
| 4 3, 1 | 9.4480457+000  | 8.4709329+000 | 7.5709329+001 | 6.8085489+002 |
| 4 4, 1 | 1.6104086+001  | 1.5897688+001 | 2.5395377+002 | 4.0616233+003 |
| 4 4, 0 | 1.6108556+001  | 1.5884203+001 | 2.5370256+002 | 4.0574622+003 |
| 5 0, 5 | -2.8616189+000 | 1.2700984+000 | 5.8699976+000 | 3.6113652+001 |
| 5 1, 5 | -2.8250329+000 | 1.4183288+000 | 5.2353920+000 | 4.0891571+001 |
| 5 1, 4 | 2.9195747+000  | 2.4089669+000 | 1.5367084+001 | 1.3892552+002 |
| 5 2, 4 | 3.6078561+000  | 4.3680868+000 | 2.3361735+001 | 1.8767716+002 |
| 5 2, 3 | 6.4308355+000  | 3.2112585+000 | 1.9592775+001 | 1.8633495+002 |
| 5 3, 3 | 9.5154750+000  | 8.7115154+000 | 8.1163755+001 | 8.0944892+002 |
| 5 3, 2 | 1.0133828+001  | 7.7236110+000 | 7.1113843+001 | 7.1356926+002 |
| 5 4, 2 | 1.6392144+001  | 1.5631913+001 | 2.4863826+002 | 3.9723228+003 |
| 5 4, 1 | 1.6430783+001  | 1.5518643+001 | 2.4653723+002 | 3.9375514+003 |
| 5 5, 1 | 2.5127740+001  | 2.4870156+001 | 6.2060085+002 | 1.5504660+004 |
| 5 5, 0 | 2.5128415+001  | 2.4867422+001 | 6.2051907+002 | 1.5502505+004 |
| 6 0, 6 | -4.6747916+000 | 1.6169424+000 | 8.4817380+000 | 6.6579631+001 |
| 6 1, 6 | -4.6622955+000 | 1.6771445+000 | 8.0389350+000 | 7.1982311+001 |
| 6 1, 5 | 2.7272727+000  | 3.6181818+000 | 2.8981818+001 | 3.0225455+002 |
| 6 2, 5 | 3.0549334+000  | 4.8276384+000 | 3.2672667+001 | 3.4880083+002 |
| 6 2, 4 | 7.5502210+000  | 3.7071067+000 | 3.3450474+001 | 4.3977709+002 |
| 6 3, 4 | 9.7410119+000  | 8.7919398+000 | 8.9803997+001 | 1.0910275+003 |
| 6 3, 3 | 1.1253329+001  | 6.8795829+000 | 6.9714560+001 | 8.8319765+002 |

TABLE II.--EXPECTATION VALUES--CONTINUED

| KAPPA = -0.30000 --CONTINUED |                |               |               |               |
|------------------------------|----------------|---------------|---------------|---------------|
| 6 4, 3                       | 1.6794872+001  | 1.5325962+001 | 2.4728055+002 | 4.1361562+003 |
| 6 4, 2                       | 1.6974280+001  | 1.4830038+001 | 2.3804232+002 | 3.9794194+003 |
| 6 5, 2                       | 2.5466738+001  | 2.4530916+001 | 6.0915707+002 | 1.5191990+004 |
| 6 5, 1                       | 2.5473944+001  | 2.4502235+001 | 6.0830362+002 | 1.5169548+004 |
| 6 6, 1                       | 3.6150195+001  | 3.5846399+001 | 1.2880468+003 | 4.6331043+004 |
| 6 6, 0                       | 3.6150290+001  | 3.5845913+001 | 1.2880255+003 | 4.6330224+004 |
| 7 0, 7                       | -6.9211264+000 | 1.9362589+000 | 1.1616616+001 | 1.1097899+002 |
| 7 1, 7                       | -6.9170526+000 | 1.9589817+000 | 1.1363087+001 | 1.1545250+002 |
| 7 1, 6                       | 2.0321103+000  | 4.8425537+000 | 4.5172327+001 | 5.5307826+002 |
| 7 2, 6                       | 2.1694711+000  | 5.4645479+000 | 4.5992322+001 | 5.9536445+002 |
| 7 2, 5                       | 8.5109657+000  | 4.9616922+000 | 6.1701960+001 | 9.8107504+002 |
| 7 3, 5                       | 9.8658771+000  | 9.1330981+000 | 1.0753954+002 | 1.6313950+003 |
| 7 3, 4                       | 1.2754402+001  | 6.4085576+000 | 7.8459448+001 | 1.3198721+003 |
| 7 4, 4                       | 1.7298007+001  | 1.5079283+001 | 2.5405152+002 | 4.7087274+003 |
| 7 4, 3                       | 1.7876426+001  | 1.3651966+001 | 2.2699084+002 | 4.2222198+003 |
| 7 5, 3                       | 2.5939180+001  | 2.4084595+001 | 6.0111706+002 | 1.5354722+004 |
| 7 5, 2                       | 2.5980267+001  | 2.3925632+001 | 5.9639270+002 | 1.5228872+004 |
| 7 6, 2                       | 3.6532522+001  | 3.5456169+001 | 1.2679562+003 | 4.5511908+004 |
| 7 6, 1                       | 3.6533735+001  | 3.5450083+001 | 1.2676906+003 | 4.5501726+004 |
| 7 7, 1                       | 4.9172601+001  | 4.8823336+001 | 2.3879803+003 | 1.1690243+005 |
| 7 7, 0                       | 4.9172614+001  | 4.8823256+001 | 2.3879755+003 | 1.1690218+005 |
| 8 0, 8                       | -9.5951452+000 | 2.2426352+000 | 1.5307372+001 | 1.7110056+002 |
| 8 1, 8                       | -9.5938606+000 | 2.2507725+000 | 1.5179746+001 | 1.7415260+002 |
| 8 1, 7                       | 8.5226596-001  | 5.9477572+000 | 6.3192866+001 | 9.0533346+002 |
| 8 2, 7                       | 9.0509612-001  | 6.2295508+000 | 6.2867064+001 | 9.4097435+002 |
| 8 2, 6                       | 9.0768438+000  | 6.9184081+000 | 1.0592427+002 | 1.9453301+003 |
| 8 3, 6                       | 9.7975135+000  | 9.7898662+000 | 1.3620003+002 | 2.5064668+003 |
| 8 3, 5                       | 1.4459723+001  | 6.6984444+000 | 1.0631946+002 | 2.2763285+003 |
| 8 4, 5                       | 1.7852994+001  | 1.5032947+001 | 2.7406192+002 | 5.8774516+003 |
| 8 4, 4                       | 1.9268230+001  | 1.2141704+001 | 2.1744859+002 | 4.7696384+003 |
| 8 5, 4                       | 2.6562273+001  | 2.3571450+001 | 6.9055380+002 | 1.6246489+004 |
| 8 5, 3                       | 2.6726474+001  | 2.2967040+001 | 5.8249058+002 | 1.5749099+004 |
| 8 6, 3                       | 3.7046825+001  | 3.4937186+001 | 1.2509643+003 | 4.5525651+004 |
| 8 6, 2                       | 3.7054985+001  | 3.4896949+001 | 1.2492140+003 | 4.5458075+004 |
| 8 7, 2                       | 4.9597710+001  | 4.8387911+001 | 2.3560664+003 | 1.1507689+005 |
| 8 7, 1                       | 4.9597901+001  | 4.8386759+001 | 2.3559971+003 | 1.1507324+005 |
| 8 8, 1                       | 6.4195085+001  | 6.3800316+001 | 4.0761067+003 | 2.6061592+005 |
| 8 8, 0                       | 6.4195087+001  | 6.3800304+001 | 4.0761057+003 | 2.6061586+005 |
| 9 0, 9                       | -1.2694733+001 | 2.5434852+000 | 1.9551313+001 | 2.4892833+002 |
| 9 1, 9                       | -1.2694338+001 | 2.5462858+000 | 1.9492689+001 | 2.5074724+002 |
| 9 1, 8                       | -7.8356551-001 | 6.9523781+000 | 8.3312301+001 | 1.3741604+003 |
| 9 2, 8                       | -7.6441855-001 | 7.0695381+000 | 8.2800516+001 | 1.4012368+003 |
| 9 2, 7                       | 9.1145870+000  | 9.1078175+000 | 1.6064762+002 | 3.3729433+003 |
| 9 3, 7                       | 9.4504786+000  | 1.0754678+001 | 1.7623069+002 | 3.7849318+003 |
| 9 3, 6                       | 1.6122856+001  | 8.0621461+000 | 1.6468267+002 | 4.1966833+003 |
| 9 4, 6                       | 1.8380883+001  | 1.5326859+001 | 3.1244233+002 | 7.8592452+003 |
| 9 4, 5                       | 2.1158116+001  | 1.0929975+001 | 2.2309681+002 | 5.9561643+003 |
| 9 5, 5                       | 2.7331387+001  | 2.3099305+001 | 6.1371592+002 | 1.8191265+004 |
| 9 5, 4                       | 2.7837672+001  | 2.1394553+001 | 5.6197258+002 | 1.6684042+004 |
| 9 6, 4                       | 3.7720016+001  | 3.4283203+001 | 1.2402267+003 | 4.6729054+004 |
| 9 6, 3                       | 3.7758482+001  | 3.4098524+001 | 1.2321898+003 | 4.6412608+004 |
| 9 7, 3                       | 5.0149383+001  | 4.7822484+001 | 2.3274188+003 | 1.1464206+005 |
| 9 7, 2                       | 5.0150857+001  | 4.7813677+001 | 2.3268908+003 | 1.1461413+005 |
| 9 8, 2                       | 6.4663519+001  | 6.3320400+001 | 4.0285304+003 | 2.5697046+005 |
| 9 8, 1                       | 6.4663548+001  | 6.3320199+001 | 4.0285145+003 | 2.5696936+005 |
| 9 9, 1                       | 8.1217634+001  | 8.0777248+001 | 6.5321419+003 | 5.2857600+005 |
| 9 9, 0                       | 8.1217635+001  | 8.0777246+001 | 6.5321417+003 | 5.2857598+005 |
| 10 0,10                      | -1.6219114+001 | 2.8420274+000 | 2.4337853+001 | 3.4668751+002 |
| 10 1,10                      | -1.6218995+001 | 2.8429617+000 | 2.4312718+001 | 3.4766755+002 |
| 10 1, 9                      | -2.8582001+000 | 7.9002325+000 | 1.0586177+002 | 1.9747072+003 |
| 10 2, 9                      | -2.8515556+000 | 7.9460309+000 | 1.0548114+002 | 1.9931510+003 |
| 10 2, 8                      | 8.6167599+000  | 1.1144914+001 | 2.2053906+002 | 5.2548202+003 |

TABLE II.--EXPECTATION VALUES--CONTINUED

KAPPA = -0.300000 --CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 10 3, 8  | 8.7587568+000  | 1.1964520+001 | 2.2679654+002 | 5.5259595+003 |
| 10 3, 7  | 1.7471082+001  | 1.0580629+001 | 2.6119504+002 | 7.6053632+003 |
| 10 4, 7  | 1.8785187+001  | 1.6055316+001 | 3.7315094+002 | 1.0887219+004 |
| 10 4, 6  | 2.3394463+001  | 1.0666013+001 | 2.6233879+002 | 8.4484532+003 |
| 10 5, 6  | 2.8209867+001  | 2.2836009+001 | 6.4881453+002 | 2.1603187+004 |
| 10 5, 5  | 2.9462112+001  | 1.9209460+001 | 5.3567165+002 | 1.8046995+004 |
| 10 6, 5  | 3.8572566+001  | 3.3530204+001 | 1.2409099+003 | 4.9559207+004 |
| 10 6, 4  | 3.8713840+001  | 3.2880339+001 | 1.2124641+003 | 4.8399193+004 |
| 10 7, 4  | 5.0853798+001  | 4.7103972+001 | 2.3046150+003 | 1.1609518+005 |
| 10 7, 3  | 5.0861763+001  | 4.7057175+001 | 2.3018137+003 | 1.1594523+005 |
| 10 8, 3  | 6.5253573+001  | 6.2714316+001 | 3.9846528+003 | 2.5553430+005 |
| 10 8, 2  | 6.5253822+001  | 6.2712573+001 | 3.9845150+003 | 2.5552473+005 |
| 10 9, 2  | 8.1729906+001  | 8.0252537+001 | 6.4644612+003 | 5.2187300+005 |
| 10 9, 1  | 8.1729910+001  | 8.0252504+001 | 6.4644579+003 | 5.2187271+005 |
| 10 10, 1 | 1.0024023+002  | 9.9754134+001 | 9.9598052+003 | 9.9498612+005 |
| 10 10, 0 | 1.0024023+002  | 9.9754133+001 | 9.9598052+003 | 9.9498612+005 |
| 11 0, 11 | -2.0168000+001 | 3.1395657+000 | 2.9658557+001 | 4.6673098+002 |
| 11 1, 11 | -2.0167965+001 | 3.1398697+000 | 2.9648346+001 | 4.6721917+002 |
| 11 1, 10 | -5.3636297+000 | 8.8202799+000 | 1.3100056+002 | 2.7224301+003 |
| 11 2, 10 | -5.3613995+000 | 8.8373632+000 | 1.3077882+002 | 2.7338050+003 |
| 11 2, 9  | 7.6236637+000  | 1.2964818+001 | 2.8465078+002 | 7.6150501+003 |
| 11 3, 9  | 7.6796902+000  | 1.3334491+001 | 2.8651764+002 | 7.7827315+003 |
| 11 3, 8  | 1.8298004+001  | 1.3767454+001 | 3.8832148+002 | 1.2708095+004 |
| 11 4, 8  | 1.8968616+001  | 1.7236201+001 | 4.5786811+002 | 1.5183419+004 |
| 11 4, 7  | 2.5725703+001  | 1.1797167+001 | 3.5578426+002 | 1.3355815+004 |
| 11 5, 7  | 2.9127582+001  | 2.2966296+001 | 7.1475051+002 | 2.6990156+004 |
| 11 5, 6  | 3.1671300+001  | 1.7045741+001 | 5.2316620+002 | 2.0444293+004 |
| 11 6, 6  | 3.9607842+001  | 3.2785038+001 | 1.2613660+003 | 5.4596212+004 |
| 11 6, 5  | 4.0032181+001  | 3.0967532+001 | 1.1807464+003 | 5.1133762+004 |
| 11 7, 5  | 5.1737939+001  | 4.6222628+001 | 2.2912530+003 | 1.1998467+005 |
| 11 7, 4  | 5.1771533+001  | 4.6030129+001 | 2.2797136+003 | 1.1935281+005 |
| 11 8, 4  | 6.5988232+001  | 6.1957135+001 | 3.9469809+003 | 2.5700917+005 |
| 11 8, 3  | 6.5989743+001  | 6.1946660+001 | 3.9461545+003 | 2.5695131+005 |
| 11 9, 3  | 8.2359896+001  | 7.9605731+001 | 6.4010133+003 | 5.1852089+005 |
| 11 9, 2  | 8.2359936+001  | 7.9605411+001 | 6.4009811+003 | 5.1851804+005 |
| 11 10, 2 | 1.0079671+002  | 9.9184263+001 | 9.8670062+003 | 9.8343740+005 |
| 11 10, 1 | 1.0079671+002  | 9.9184258+001 | 9.8670055+003 | 9.8343733+005 |
| 11 11, 1 | 1.2126286+002  | 1.2073098+002 | 1.4586817+004 | 1.7632603+006 |
| 11 11, 0 | 1.2126286+002  | 1.2073098+002 | 1.4586817+004 | 1.7632603+006 |
| 12 0, 12 | -2.4541278+001 | 3.4366194+000 | 3.5508511+001 | 6.1144568+002 |
| 12 1, 12 | -2.4541268+001 | 3.4367163+000 | 3.5504539+001 | 6.1167400+002 |
| 12 1, 11 | -8.2964325+000 | 9.7272314+000 | 1.5877559+002 | 3.6333610+003 |
| 12 2, 11 | -8.2957036+000 | 9.7333716+000 | 1.5866278+002 | 3.6398006+003 |
| 12 2, 10 | 6.1690864+000  | 1.4635795+001 | 3.5393320+002 | 1.0507887+004 |
| 12 3, 10 | 6.1901007+000  | 1.4791280+001 | 3.5420047+002 | 1.0607211+004 |
| 12 3, 9  | 1.8540697+001  | 1.6923004+001 | 5.2999860+002 | 1.9326629+004 |
| 12 4, 9  | 1.8848362+001  | 1.8808025+001 | 5.6566301+002 | 2.0931690+004 |
| 12 4, 8  | 2.7854633+001  | 1.4557060+001 | 5.2205023+002 | 2.2143138+004 |
| 12 5, 8  | 2.9989709+001  | 2.3635294+001 | 8.1916188+002 | 3.4925087+004 |
| 12 5, 7  | 3.4368070+001  | 1.5860240+001 | 5.5919623+002 | 2.5407458+004 |
| 12 6, 7  | 4.0800919+001  | 3.2230972+001 | 1.3134583+003 | 6.2629584+004 |
| 12 6, 6  | 4.1863962+001  | 2.8191189+001 | 1.1301500+003 | 5.4213069+004 |
| 12 7, 6  | 5.2824653+001  | 4.5206793+001 | 2.2933049+003 | 1.2698013+005 |
| 12 7, 5  | 5.2941500+001  | 4.4561750+001 | 2.2544169+003 | 1.2477580+005 |
| 12 8, 5  | 6.6893055+001  | 6.1024143+001 | 3.9183086+003 | 2.6211433+005 |
| 12 8, 4  | 6.6900222+001  | 6.0975302+001 | 3.9144577+003 | 2.6184062+005 |
| 12 9, 4  | 8.3127542+001  | 7.8814247+001 | 6.3445045+003 | 5.1949819+005 |
| 12 9, 3  | 8.3127811+001  | 7.8812105+001 | 6.3442890+003 | 5.1947906+005 |
| 12 10, 3 | 1.0146786+002  | 9.8495678+001 | 9.7790092+003 | 9.7677376+005 |
| 12 10, 2 | 1.0146787+002  | 9.8495623+001 | 9.7790023+003 | 9.7677300+005 |
| 12 11, 2 | 1.2186381+002  | 1.2011567+002 | 1.4463324+004 | 1.7443837+006 |

TABLE II.--EXPECTATION VALUES--CONTINUED

KAPPA = -0.300000 --CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 12 11, 1 | 1.2186381+002  | 1.2011567+002 | 1.4463324+004 | 1.7443837+006 |
| 12 12, 1 | 1.4428551+002  | 1.4370781+002 | 2.0664898+004 | 2.9728548+006 |
| 12 12, 0 | 1.4428551+002  | 1.4370781+002 | 2.0664898+004 | 2.9728548+006 |
| 13 0,13  | -2.9338897+001 | 3.7334021+000 | 4.1885271+001 | 7.8321061+002 |
| 13 1,13  | -2.9338894+001 | 3.7334325+000 | 4.1883781+001 | 7.8331200+002 |
| 13 1,12  | -1.1655157+001 | 1.0627833+001 | 1.8919057+002 | 4.7239443+003 |
| 13 2,12  | -1.1654923+001 | 1.0629975+001 | 1.8913813+002 | 4.7273348+003 |
| 13 2,11  | 4.2717546+000  | 1.6224894+001 | 4.2926496+002 | 1.3995998+004 |
| 13 3,11  | 4.2793344+000  | 1.6286937+001 | 4.2911923+002 | 1.4052486+004 |
| 13 3,10  | 1.8234257+001  | 1.9745300+001 | 6.7828215+002 | 2.7331259+004 |
| 13 4,10  | 1.8364831+001  | 2.0661016+001 | 6.9385749+002 | 2.8271624+004 |
| 13 4, 9  | 2.9511090+001  | 1.8601505+001 | 7.5840037+002 | 3.5723389+004 |
| 13 5, 9  | 3.0692231+001  | 2.4903387+001 | 9.6641504+002 | 4.5975854+004 |
| 13 5, 8  | 3.7313237+001  | 1.6358008+001 | 6.8059881+002 | 3.5365600+004 |
| 13 6, 8  | 4.2092934+001  | 3.2092370+001 | 1.4111997+003 | 7.4685919+004 |
| 13 6, 7  | 4.4330764+001  | 2.5010922+001 | 1.0794658+003 | 5.8262921+004 |
| 13 7, 7  | 5.4123849+001  | 4.4154982+001 | 2.3209739+003 | 1.3800334+005 |
| 13 7, 6  | 5.4468831+001  | 4.2358725+001 | 2.2114387+003 | 1.3149459+005 |
| 13 8, 6  | 6.7994880+001  | 5.9901237+001 | 3.9024160+003 | 2.7161998+005 |
| 13 8, 5  | 6.8022963+001  | 5.9714283+001 | 3.8876460+003 | 2.7054496+005 |
| 13 9, 5  | 8.4055269+001  | 7.7852292+001 | 6.2976220+003 | 5.2578336+005 |
| 13 9, 4  | 8.4056680+001  | 7.7841173+001 | 6.2965051+003 | 5.2568315+005 |
| 13 10, 4 | 1.0227116+002  | 9.7668561+001 | 9.6988134+003 | 9.7632532+005 |
| 13 10, 3 | 1.0227120+002  | 9.7668153+001 | 9.6987624+003 | 9.7631971+005 |
| 13 11, 3 | 1.2257700+002  | 1.1938435+002 | 1.4345217+004 | 1.7323970+006 |
| 13 11, 2 | 1.2257700+002  | 1.1938434+002 | 1.4345216+004 | 1.7323968+006 |
| 13 12, 2 | 1.4493112+002  | 1.4304684+002 | 2.0504575+004 | 2.9433138+006 |
| 13 12, 1 | 1.4493112+002  | 1.4304684+002 | 2.0504575+004 | 2.9433138+006 |
| 13 13, 1 | 1.6930818+002  | 1.6868462+002 | 2.8469769+004 | 4.8068196+006 |
| 13 13, 0 | 1.6930818+002  | 1.6868462+002 | 2.8469769+004 | 4.8068196+006 |
| 14 0,14  | -3.4560827+001 | 4.0300102+000 | 4.8787740+001 | 9.8438735+002 |
| 14 1,14  | -3.4560826+001 | 4.0300196+000 | 4.8787197+001 | 9.8443046+002 |
| 14 1,13  | -1.5439151+001 | 1.1525081+001 | 2.2223924+002 | 6.0107707+003 |
| 14 2,13  | -1.5439078+001 | 1.1525809+001 | 2.2221643+002 | 6.0124496+003 |
| 14 2,12  | 1.9406657+000  | 1.7772170+001 | 5.1110894+002 | 1.8142244+004 |
| 14 3,12  | 1.9433154+000  | 1.7795919+001 | 5.1093919+002 | 1.8173027+004 |
| 14 3,11  | 1.7429441+001  | 2.2271576+001 | 8.3359314+002 | 3.6798007+004 |
| 14 4,11  | 1.7481778+001  | 2.2682599+001 | 8.3948152+002 | 3.7315680+004 |
| 14 4,10  | 3.0554826+001  | 2.2997538+001 | 1.0346970+003 | 5.3634070+004 |
| 14 5,10  | 3.1138770+001  | 2.6729362+001 | 1.1564289+003 | 6.0616524+004 |
| 14 5, 9  | 4.0195957+001  | 1.8944968+001 | 9.2226255+002 | 5.3607701+004 |
| 14 6, 9  | 4.3395093+001  | 3.2571128+001 | 1.5679004+003 | 9.1977967+004 |
| 14 6, 8  | 4.7408833+001  | 2.2587846+001 | 1.0834078+003 | 6.6197685+004 |
| 14 7, 8  | 5.5621488+001  | 4.3253950+001 | 2.3899206+003 | 1.5438732+005 |
| 14 7, 7  | 5.6495818+001  | 3.9115187+001 | 2.1327631+003 | 1.3818165+005 |
| 14 8, 7  | 6.9318211+001  | 5.8607255+001 | 3.9056906+003 | 2.8646025+005 |
| 14 8, 6  | 6.9412246+001  | 5.8001561+001 | 3.8575787+003 | 2.8284020+005 |
| 14 9, 6  | 8.5167958+001  | 7.6693354+001 | 6.2631903+003 | 5.3834711+005 |
| 14 9, 5  | 8.5174087+001  | 7.6645864+001 | 6.2584195+003 | 5.3791177+005 |
| 14 10, 5 | 1.0322613+002  | 9.6679735+001 | 9.6293262+003 | 9.8341944+005 |
| 14 10, 4 | 1.0322639+002  | 9.6677403+001 | 9.6290353+003 | 9.8338724+005 |
| 14 11, 4 | 1.2341797+002  | 1.1851956+002 | 1.4235812+004 | 1.7290604+006 |
| 14 11, 3 | 1.2341798+002  | 1.1851949+002 | 1.4235800+004 | 1.7290589+006 |
| 14 12, 3 | 1.4568700+002  | 1.4227206+002 | 2.0350235+004 | 2.9232242+006 |
| 14 12, 2 | 1.4568700+002  | 1.4227206+002 | 2.0350235+004 | 2.9232241+006 |
| 14 13, 2 | 1.6999860+002  | 1.6797784+002 | 2.8265922+004 | 4.7622461+006 |
| 14 13, 1 | 1.6999860+002  | 1.6797784+002 | 2.8265922+004 | 4.7622461+006 |
| 14 14, 1 | 1.9633086+002  | 1.9566141+002 | 3.8301150+004 | 7.5000700+006 |
| 14 14, 0 | 1.9633086+002  | 1.9566141+002 | 3.8301150+004 | 7.5000700+006 |
| 15 0,15  | -4.0207054+001 | 4.3264932+000 | 5.6215461+001 | 1.2173233+003 |
| 15 1,15  | -4.0207054+001 | 4.3264960+000 | 5.6215268+001 | 1.2173409+003 |
| 15 1,14  | -1.9648092+001 | 1.2420334+001 | 2.5791607+002 | 7.5104110+003 |

TABLE II. -- EXPECTATION VALUES -- CONTINUED

KAPPA = -0.300000 -- CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 15 2,14  | -1.9648069+001 | 1.2420577+001 | 2.5790665+002 | 7.5112000+003 |
| 15 2,13  | -8.2001183-001 | 1.9297983+001 | 5.9965684+002 | 2.3008307+004 |
| 15 3,13  | -8.1910920-001 | 1.9306770+001 | 5.9954549+002 | 2.3024364+004 |
| 15 3,12  | 1.6160499+001  | 2.4613851+001 | 9.9839185+002 | 4.7897792+004 |
| 15 4,12  | 1.6180577+001  | 2.4787862+001 | 1.0002865+003 | 4.8171465+004 |
| 15 4,11  | 3.0988511+001  | 2.7044530+001 | 1.3240207+003 | 7.4991542+004 |
| 15 5,11  | 3.1253252+001  | 2.8992490+001 | 1.3852528+003 | 7.9176468+004 |
| 15 5,10  | 4.2698242+001  | 2.3514976+001 | 1.2968276+003 | 8.2972824+004 |
| 15 6,10  | 4.4601416+001  | 3.3785240+001 | 1.7928168+003 | 1.1575795+005 |
| 15 6, 9  | 5.0896996+001  | 2.2017622+001 | 1.2074211+003 | 8.2975278+004 |
| 15 7, 9  | 5.7271134+001  | 4.2757251+001 | 2.5203267+003 | 1.7797427+005 |
| 15 7, 8  | 5.9173837+001  | 3.5007052+001 | 2.0256685+003 | 1.4464637+005 |
| 15 8, 8  | 7.0878157+001  | 5.7227166+001 | 3.9396792+003 | 3.0796116+005 |
| 15 8, 7  | 7.1152398+001  | 5.5545185+001 | 3.8047428+003 | 2.9736269+005 |
| 15 9, 7  | 8.6492131+001  | 7.5318739+001 | 6.2448955+003 | 5.5819648+005 |
| 15 9, 6  | 8.6514912+001  | 7.5145991+001 | 6.2275013+003 | 5.5657085+005 |
| 15 10, 6 | 1.0435460+002  | 9.5502562+001 | 9.5732772+003 | 9.9934753+005 |
| 15 10, 5 | 1.0435584+002  | 9.5491607+001 | 9.5719118+003 | 9.9919453+005 |
| 15 11, 5 | 1.2440390+002  | 1.1750101+002 | 1.4138338+004 | 1.7361371+006 |
| 15 11, 4 | 1.2440395+002  | 1.1750055+002 | 1.4138268+004 | 1.7361278+006 |
| 15 12, 4 | 1.4656712+002  | 1.4136789+002 | 2.0205507+004 | 2.9148602+006 |
| 15 12, 3 | 1.4656713+002  | 1.4136788+002 | 2.0205505+004 | 2.9148598+006 |
| 15 13, 3 | 1.7079765+002  | 1.6715906+002 | 2.8068665+004 | 4.7303355+006 |
| 15 13, 2 | 1.7079765+002  | 1.6715906+002 | 2.8068665+004 | 4.7303355+006 |
| 15 14, 2 | 1.9706619+002  | 1.9490870+002 | 3.8046527+004 | 7.4348705+006 |
| 15 14, 1 | 1.9706619+002  | 1.9490870+002 | 3.8046527+004 | 7.4348705+006 |
| 15 15, 1 | 2.2535355+002  | 2.2463819+002 | 5.0482761+004 | 1.1348378+007 |
| 15 15, 0 | 2.2535355+002  | 2.2463819+002 | 5.0482761+004 | 1.1348378+007 |

KAPPA = - 0.400000

|        |                |               |               |               |
|--------|----------------|---------------|---------------|---------------|
| 2 0, 2 | -9.1339863-002 | 8.7350568-002 | 3.4940227-001 | 1.3976091+000 |
| 2 1, 2 | 4.7058824-001  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 1, 1 | 1.5294118+000  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 2, 1 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 2 2, 0 | 4.0913399+000  | 3.9126494+000 | 1.5650598+001 | 6.2602391+001 |
| 3 0, 3 | -4.2250121-001 | 3.4881403-001 | 1.3952561+000 | 5.5810245+000 |
| 3 1, 3 | -1.1009937-001 | 1.0447757+000 | 1.4477567+000 | 5.0745863+000 |
| 3 1, 2 | 1.9921656+000  | 1.0753784+000 | 1.7537838+000 | 7.8594325+000 |
| 3 2, 2 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 3 2, 1 | 4.4225012+000  | 3.6511860+000 | 1.4604744+001 | 5.8418975+001 |
| 3 3, 1 | 9.0512758+000  | 8.9552243+000 | 8.0552243+001 | 7.2492541+002 |
| 3 3, 0 | 9.0666580+000  | 8.9246216+000 | 8.0246216+001 | 7.2214057+002 |
| 4 0, 4 | -1.1083802+000 | 7.2723027-001 | 3.0116880+000 | 1.3691023+001 |
| 4 1, 4 | -9.6165486-001 | 1.1550992+000 | 2.5509925+000 | 1.5114031+001 |
| 4 1, 3 | 2.4645085+000  | 1.3513295+000 | 4.5132953+000 | 3.2970987+001 |
| 4 2, 3 | 3.9277704+000  | 4.0713704+000 | 1.7427408+001 | 8.7980462+001 |
| 4 2, 2 | 5.0340157+000  | 3.3505716+000 | 1.4535600+001 | 7.6275426+001 |
| 4 3, 2 | 9.1969490+000  | 8.8449008+000 | 7.9449008+001 | 7.1488597+002 |
| 4 3, 1 | 9.3001974+000  | 8.6486705+000 | 7.7486705+001 | 6.9702901+002 |
| 4 4, 1 | 1.6072230+001  | 1.5928630+001 | 2.5457259+002 | 4.0720195+003 |
| 4 4, 0 | 1.6074365+001  | 1.5922198+001 | 2.5445271+002 | 4.0700336+003 |
| 5 0, 5 | -2.1812792+000 | 1.1073754+000 | 4.9491752+000 | 2.8111479+001 |
| 5 1, 5 | -2.1197545+000 | 1.3295172+000 | 4.3251385+000 | 3.2034882+001 |
| 5 1, 4 | 2.7952025+000  | 1.9824179+000 | 1.0957075+001 | 9.5051405+001 |
| 5 2, 4 | 3.7259804+000  | 4.2620517+000 | 2.1241034+001 | 1.5204937+002 |
| 5 2, 3 | 5.8885602+000  | 3.2099404+000 | 1.7318894+001 | 1.4094169+002 |
| 5 3, 3 | 9.3845167+000  | 8.7597342+000 | 8.0701655+001 | 7.8078678+002 |
| 5 3, 2 | 9.7634099+000  | 8.1079116+000 | 7.4101997+001 | 7.1862080+002 |
| 5 4, 2 | 1.6274020+001  | 1.5737948+001 | 2.5075897+002 | 4.0079506+003 |
| 5 4, 1 | 1.6292719+001  | 1.5682684+001 | 2.4973193+002 | 3.9909468+003 |
| 5 5, 1 | 2.5088179+001  | 2.4910749+001 | 6.2197321+002 | 1.5542178+004 |
| 5 5, 0 | 2.5088446+001  | 2.4909671+001 | 6.2194093+002 | 1.5541328+004 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.400000—CONTINUED

|        |                |               |               |               |
|--------|----------------|---------------|---------------|---------------|
| 6 0, 6 | -3.6319484+000 | 1.4482056+000 | 7.2051119+000 | 5.1637119+001 |
| 6 1, 6 | -3.6079405+000 | 1.5513171+000 | 6.6762484+000 | 5.6877568+001 |
| 6 1, 5 | 2.8208634+000  | 2.9806913+000 | 2.1769847+001 | 2.1494561+002 |
| 6 2, 5 | 3.3328959+000  | 4.6062400+000 | 2.8186756+001 | 2.7116620+002 |
| 6 2, 4 | 6.8758032+000  | 3.4116671+000 | 2.5711849+001 | 2.9934831+002 |
| 6 3, 4 | 9.5793490+000  | 8.7732282+000 | 8.6303879+001 | 9.7336967+002 |
| 6 3, 3 | 1.0559430+001  | 7.3553382+000 | 7.1552875+001 | 8.2431803+002 |
| 6 4, 3 | 1.6563516+001  | 1.5498984+001 | 2.4926862+002 | 4.1118391+003 |
| 6 4, 2 | 1.6652526+001  | 1.5245510+001 | 2.4454538+002 | 4.0322876+003 |
| 6 5, 2 | 2.5322709+001  | 2.4675455+001 | 6.1401987+002 | 1.5324753+004 |
| 6 5, 1 | 2.5325589+001  | 2.4663970+001 | 6.1367728+002 | 1.5315736+004 |
| 6 6, 1 | 3.6103588+001  | 3.5894776+001 | 1.2905446+003 | 4.6432995+004 |
| 6 6, 0 | 3.6103620+001  | 3.5894617+001 | 1.2905377+003 | 4.6432727+004 |
| 7 0, 7 | -5.4480311+000 | 1.7571071+000 | 9.8680681+000 | 8.6316062+001 |
| 7 1, 7 | -5.4391004+000 | 1.8915096+000 | 9.5114491+000 | 9.1366430+001 |
| 7 1, 6 | 2.4429075+000  | 4.1313329+000 | 3.5748131+001 | 4.0670474+002 |
| 7 2, 6 | 2.6914911+000  | 5.1089969+000 | 3.8561741+001 | 4.5800389+002 |
| 7 2, 5 | 7.8391005+000  | 4.1503879+000 | 4.3800234+001 | 6.3880410+002 |
| 7 3, 5 | 9.7267014+000  | 8.9636610+000 | 9.8374217+001 | 1.3503846+003 |
| 7 3, 4 | 1.1710346+001  | 6.6992249+000 | 7.4086863+001 | 1.0868374+003 |
| 7 4, 4 | 1.6941176+001  | 1.5264000+001 | 2.5272000+002 | 4.4893440+003 |
| 7 4, 3 | 1.7241197+001  | 1.4467513+001 | 2.3770141+002 | 4.2256040+003 |
| 7 5, 3 | 2.5652194+001  | 2.4355783+001 | 6.0803967+002 | 1.5425332+004 |
| 7 5, 2 | 2.5668890+001  | 2.4290417+001 | 6.0609164+002 | 1.5373609+004 |
| 7 6, 2 | 3.6367332+001  | 3.5627003+001 | 1.2767183+003 | 4.5868652+004 |
| 7 6, 1 | 3.6367734+001  | 3.5624992+001 | 1.2766303+003 | 4.5865276+004 |
| 7 7, 1 | 4.9119029+001  | 4.8879047+001 | 2.3920747+003 | 1.1713692+005 |
| 7 7, 0 | 4.9119033+001  | 4.8879025+001 | 2.3920734+003 | 1.1713685+005 |
| 8 0, 8 | -7.6225258+000 | 2.0480776+000 | 1.2991581+001 | 1.3367787+002 |
| 8 1, 8 | -7.6193146+000 | 2.0662039+000 | 1.2782901+001 | 1.3766009+002 |
| 8 1, 7 | 1.6468993+000  | 5.2309563+000 | 5.1583745+001 | 6.7986415+002 |
| 8 2, 7 | 1.7570546+000  | 5.7452998+000 | 5.2215497+001 | 7.2391125+002 |
| 8 2, 6 | 8.5914915+000  | 5.5533092+000 | 7.5394789+001 | 1.2813936+003 |
| 8 3, 6 | 9.7596424+000  | 9.3926427+000 | 1.1875130+002 | 1.9736614+003 |
| 8 3, 5 | 1.3130665+001  | 6.4886436+000 | 8.7757643+001 | 1.6440480+003 |
| 8 4, 5 | 1.7385802+001  | 1.5123558+001 | 2.6460357+002 | 5.2705499+003 |
| 8 4, 4 | 1.8171157+001  | 1.3281017+001 | 2.2902411+002 | 4.6022032+003 |
| 8 5, 4 | 2.6094579+001  | 2.3960179+001 | 6.0630266+002 | 1.6010790+004 |
| 8 5, 3 | 2.6163172+001  | 2.3699740+001 | 5.9851446+002 | 1.5799201+004 |
| 8 6, 3 | 3.6722609+001  | 3.5267849+001 | 1.2648163+003 | 4.5869546+004 |
| 8 6, 2 | 3.6725342+001  | 3.5254305+001 | 1.2642251+003 | 4.5846748+004 |
| 8 7, 2 | 4.9412152+001  | 4.8580975+001 | 2.3701631+003 | 1.1588189+005 |
| 8 7, 1 | 4.9412204+001  | 4.8580660+001 | 2.3701442+003 | 1.1588089+005 |
| 8 8, 1 | 6.4134534+001  | 6.3863293+001 | 4.0823646+003 | 2.6109599+005 |
| 8 8, 0 | 6.4134535+001  | 6.3863291+001 | 4.0823644+003 | 2.6109598+005 |
| 9 0, 9 | -1.0152261+001 | 2.3303089+000 | 1.6589585+001 | 1.9521593+002 |
| 9 1, 9 | -1.0151136+001 | 2.3374175+000 | 1.6478906+001 | 1.9794780+002 |
| 9 1, 8 | 4.5406044-001  | 6.2283944+000 | 6.9028051+001 | 1.0451131+003 |
| 9 2, 8 | 4.9986261-001  | 6.4748377+000 | 6.8778476+001 | 1.0806066+003 |
| 9 2, 7 | 8.9695783+000  | 7.4572280+000 | 1.1990341+002 | 2.3191085+003 |
| 9 3, 7 | 9.6091012+000  | 1.0086437+001 | 1.4854418+002 | 2.9041974+003 |
| 9 3, 6 | 1.4664496+001  | 6.9959519+000 | 1.2024553+002 | 2.7465784+003 |
| 9 4, 6 | 1.7852714+001  | 1.5186847+001 | 2.8888819+002 | 6.6112352+003 |
| 9 4, 5 | 1.9522117+001  | 1.1938181+001 | 2.2397079+002 | 5.2869554+003 |
| 9 5, 5 | 2.6658317+001  | 2.3535010+001 | 6.1236727+002 | 1.7290172+004 |
| 9 5, 4 | 2.6879672+001  | 2.2736960+001 | 5.8826371+002 | 1.6608396+004 |
| 9 6, 4 | 3.7189896+001  | 3.4803449+001 | 1.2566161+003 | 4.6677148+004 |
| 9 6, 3 | 3.7203032+001  | 3.4739461+001 | 1.2538225+003 | 4.6567961+004 |
| 9 7, 3 | 4.9792455+001  | 4.8193637+001 | 2.3503882+003 | 1.1557646+005 |
| 9 7, 2 | 4.9792862+001  | 4.8191196+001 | 2.3502413+003 | 1.1556869+005 |
| 9 8, 2 | 6.4457527+001  | 6.3534866+001 | 4.0497173+003 | 2.5859101+005 |

TABLE II.--EXPECTATION VALUES--CONTINUED

KAPPA = -0.400000 --CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 9 8, 1   | 6.4457534+001  | 6.3534821+001 | 4.0497137+003 | 2.5859076+005 |
| 9 9, 1   | 8.1150086+001  | 8.0847498+001 | 6.5412215+003 | 5.2947623+005 |
| 9 9, 0   | 8.1150086+001  | 8.0847497+001 | 6.5412214+003 | 5.2947622+005 |
| 10 0,10  | -1.3035922+001 | 2.6085283+000 | 2.0658340+001 | 2.7258059+002 |
| 10 1,10  | -1.3035535+001 | 2.6112300+000 | 2.0603762+001 | 2.7427064+002 |
| 10 1, 9  | -1.1152014+000 | 7.1489518+000 | 8.8330022+001 | 1.5143223+003 |
| 10 2, 9  | -1.0970114+000 | 7.2594768+000 | 8.7905561+001 | 1.5408522+003 |
| 10 2, 8  | 8.8979954+000  | 9.4720869+000 | 1.7238469+002 | 3.7652305+003 |
| 10 3, 8  | 9.2136806+000  | 1.1027485+001 | 1.8787520+002 | 4.1972835+003 |
| 10 3, 7  | 1.6115230+001  | 8.4431409+000 | 1.8064542+002 | 4.7898587+003 |
| 10 4, 7  | 1.8278352+001  | 1.5552952+001 | 3.2937012+002 | 6.6899614+003 |
| 10 4, 6  | 2.1269532+001  | 1.0968017+001 | 2.3459530+002 | 6.6089761+003 |
| 10 5, 6  | 2.7334446+001  | 2.3174227+001 | 6.3135448+002 | 1.9531225+004 |
| 10 5, 5  | 2.7922089+001  | 2.1234103+001 | 5.7165489+002 | 1.7741112+004 |
| 10 6, 5  | 3.7788789+001  | 3.4235393+001 | 1.2547455+003 | 4.8572012+004 |
| 10 6, 4  | 3.7838467+001  | 3.3999588+001 | 1.2444145+003 | 4.8158239+004 |
| 10 7, 4  | 5.0278206+001  | 4.7698666+001 | 2.3343793+003 | 1.1657103+005 |
| 10 7, 3  | 5.0280444+001  | 4.7685418+001 | 2.3335830+003 | 1.1652857+005 |
| 10 8, 3  | 6.4864201+001  | 6.3120509+001 | 4.0195253+003 | 2.5759536+005 |
| 10 8, 2  | 6.4864258+001  | 6.3120111+001 | 4.0194937+003 | 2.5759316+005 |
| 10 9, 2  | 8.1503320+001  | 8.0488392+001 | 6.4947873+003 | 5.2487119+005 |
| 10 9, 1  | 8.1503321+001  | 8.0488386+001 | 6.4947866+003 | 5.2487114+005 |
| 10 10, 1 | 1.0016567+002  | 9.9831669+001 | 9.9724535+003 | 9.9656182+005 |
| 10 10, 0 | 1.0016567+002  | 9.9831669+001 | 9.9724535+003 | 9.9656182+005 |
| 11 0,11  | -1.6272976+001 | 2.8849231+000 | 2.5190446+001 | 3.6756566+002 |
| 11 1,11  | -1.6272845+001 | 2.8859243+000 | 2.5165009+001 | 3.6853059+002 |
| 11 1,10  | -3.0489333+000 | 8.0249874+000 | 1.0972403+002 | 2.0996883+003 |
| 11 2,10  | -3.0419561+000 | 8.0721713+000 | 1.0938196+002 | 2.1180159+003 |
| 11 2, 9  | 8.3820979+000  | 1.1341673+001 | 2.2911894+002 | 5.6099842+003 |
| 11 3, 9  | 8.5263392+000  | 1.2163762+001 | 2.3664609+002 | 5.9009079+003 |
| 11 3, 8  | 1.7276597+001  | 1.0838557+001 | 2.7381337+002 | 8.1880543+003 |
| 11 4, 8  | 1.8589256+001  | 1.6284241+001 | 3.8889567+002 | 1.1696452+004 |
| 11 4, 7  | 2.3281727+001  | 1.0844096+001 | 2.7560806+002 | 9.1574298+003 |
| 11 5, 7  | 2.8091197+001  | 2.3008594+001 | 6.6966828+002 | 2.3073414+004 |
| 11 5, 6  | 2.9401492+001  | 1.9250984+001 | 5.5072778+002 | 1.9238691+004 |
| 11 6, 6  | 3.8533097+001  | 3.3598783+001 | 1.2634128+003 | 5.1903709+004 |
| 11 6, 5  | 3.8689197+001  | 3.2886941+001 | 1.2319662+003 | 5.0596704+004 |
| 11 7, 5  | 5.0889411+001  | 4.7079700+001 | 2.3240917+003 | 1.1924119+005 |
| 11 7, 4  | 5.0899056+001  | 4.7023512+001 | 2.3207120+003 | 1.1905815+005 |
| 11 8, 4  | 6.5370203+001  | 6.2603185+001 | 3.9935148+003 | 2.5861276+005 |
| 11 8, 3  | 6.5370554+001  | 6.2600748+001 | 3.9933217+003 | 2.5859926+005 |
| 11 9, 3  | 8.1937564+001  | 8.0046203+001 | 6.4511596+003 | 5.2255257+005 |
| 11 9, 2  | 8.1937571+001  | 8.0046142+001 | 6.4511535+003 | 5.2255203+005 |
| 11 10, 2 | 1.0054940+002  | 9.9441619+001 | 9.9087948+003 | 9.8862906+005 |
| 11 10, 1 | 1.0054940+002  | 9.9441618+001 | 9.9087947+003 | 9.8862905+005 |
| 11 11, 1 | 1.2118128+002  | 1.2081582+002 | 1.4603869+004 | 1.7658694+006 |
| 11 11, 0 | 1.2118128+002  | 1.2081582+002 | 1.4603869+004 | 1.7658694+006 |
| 12 0,12  | -1.9863206+001 | 3.1604563+000 | 3.0179971+001 | 4.8203953+002 |
| 12 1,12  | -1.9863162+001 | 3.1608197+000 | 3.0168638+001 | 4.8255615+002 |
| 12 1,11  | -5.3412316+000 | 8.8777793+000 | 1.3332862+002 | 2.8136987+003 |
| 12 2,11  | -5.3386276+000 | 8.8971619+000 | 1.3311081+002 | 2.8254502+003 |
| 12 2,10  | 7.4537075+000  | 1.3030274+001 | 2.8950458+002 | 7.8726471+003 |
| 12 3,10  | 7.5160052+000  | 1.3431215+001 | 2.9202620+002 | 8.0579458+003 |
| 12 3, 9  | 1.7997663+001  | 1.3776964+001 | 3.9306085+002 | 1.3082600+004 |
| 12 4, 9  | 1.8712691+001  | 1.7389099+001 | 4.6868323+002 | 1.5811273+004 |
| 12 4, 8  | 2.5362802+001  | 1.1899412+001 | 3.6336631+002 | 1.3857925+004 |
| 12 5, 8  | 2.8874127+001  | 2.3175873+001 | 7.3410736+002 | 2.8328393+004 |
| 12 5, 7  | 3.1365314+001  | 1.7310586+001 | 5.4184535+002 | 2.1636037+004 |
| 12 6, 7  | 3.9423867+001  | 3.2979122+001 | 1.2891375+003 | 5.7135973+004 |
| 12 6, 6  | 3.9842935+001  | 3.1186883+001 | 1.2088030+003 | 5.3625243+004 |
| 12 7, 6  | 5.1646315+001  | 4.6331375+001 | 2.3222805+003 | 1.2400725+005 |
| 12 7, 5  | 5.1680900+001  | 4.6134365+001 | 2.3103894+003 | 1.2334749+005 |



TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.400000—CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 12 8, 5  | 6.5993105+001  | 6.1963934+001 | 3.9734871+003 | 2.6216435+005 |
| 12 8, 4  | 6.5994796+001  | 6.1952302+001 | 3.9725659+003 | 2.6209931+005 |
| 12 9, 4  | 8.2466326+001  | 7.9506086+001 | 6.4122521+003 | 5.2322456+005 |
| 12 9, 3  | 8.2466378+001  | 7.9505675+001 | 6.4122106+003 | 5.2322088+005 |
| 12 10, 3 | 1.0101207+002  | 9.8970734+001 | 9.8483036+003 | 9.8402473+005 |
| 12 10, 2 | 1.0101207+002  | 9.8970725+001 | 9.8483026+003 | 9.8402461+005 |
| 12 11, 2 | 1.2159568+002  | 1.2039463+002 | 1.4519165+004 | 1.7529053+006 |
| 12 11, 1 | 1.2159568+002  | 1.2039463+002 | 1.4519165+004 | 1.7529053+006 |
| 12 12, 1 | 1.4419690+002  | 1.4379995+002 | 2.0687278+004 | 2.9769822+006 |
| 12 12, 0 | 1.4419690+002  | 1.4379995+002 | 2.0687278+004 | 2.9769822+006 |
| 13 0,13  | -2.3806517+001 | 3.4355466+000 | 3.5623236+001 | 6.1789215+002 |
| 13 1,13  | -2.3806503+001 | 3.4356762+000 | 3.5618370+001 | 6.1815454+002 |
| 13 1,12  | -7.9893602+000 | 9.7188087+000 | 1.5918531+002 | 3.6691817+003 |
| 13 2,12  | -7.9884097+000 | 9.7265272+000 | 1.5906335+002 | 3.6762291+003 |
| 13 2,11  | 6.1391113+000  | 1.4589834+001 | 3.5424889+002 | 1.0595823+004 |
| 13 3,11  | 6.1649001+000  | 1.4774226+001 | 3.5490464+002 | 1.0709504+004 |
| 13 3,10  | 1.8229804+001  | 1.6715055+001 | 5.2566092+002 | 1.9322807+004 |
| 13 4,10  | 1.8586097+001  | 1.8821634+001 | 5.6813437+002 | 2.1186422+004 |
| 13 4, 9  | 2.7285871+001  | 1.4319704+001 | 5.1286784+002 | 2.1901978+004 |
| 13 5, 9  | 2.9612066+001  | 2.3785243+001 | 8.3060068+002 | 3.5758579+004 |
| 13 5, 8  | 3.3740674+001  | 1.6152010+001 | 5.7227068+002 | 2.6166712+004 |
| 13 6, 8  | 4.0442445+001  | 3.2514053+001 | 1.3409224+003 | 6.4892039+004 |
| 13 6, 7  | 4.1414879+001  | 2.8763158+001 | 1.1690324+003 | 5.6901424+004 |
| 13 7, 7  | 5.2566092+001  | 4.5475520+001 | 2.3334076+003 | 1.3138474+005 |
| 13 7, 6  | 5.2672810+001  | 4.4886968+001 | 2.2976340+003 | 1.2933190+005 |
| 13 8, 6  | 6.6752234+001  | 6.1184233+001 | 3.9614521+003 | 2.6878882+005 |
| 13 8, 5  | 6.6759015+001  | 6.1138269+001 | 3.9578080+003 | 2.6852729+005 |
| 13 9, 5  | 8.3104713+001  | 7.8850872+001 | 6.3799868+003 | 5.2760992+005 |
| 13 9, 4  | 8.3104988+001  | 7.8848698+001 | 6.3797674+003 | 5.2759031+005 |
| 13 10, 4 | 1.0156552+002  | 9.8406066+001 | 9.7931034+003 | 9.8370318+005 |
| 13 10, 3 | 1.0156553+002  | 9.8406002+001 | 9.7930953+003 | 9.8370229+005 |
| 13 11, 3 | 1.2208738+002  | 1.1989439+002 | 1.4437995+004 | 1.7446295+006 |
| 13 11, 2 | 1.2208738+002  | 1.1989439+002 | 1.4437995+004 | 1.7446295+006 |
| 13 12, 2 | 1.4464211+002  | 1.4334749+002 | 2.0577324+004 | 2.9566973+006 |
| 13 12, 1 | 1.4464211+002  | 1.4334749+002 | 2.0577324+004 | 2.9566973+006 |
| 13 13, 1 | 1.6921253+002  | 1.6878407+002 | 2.8498487+004 | 4.8131046+006 |
| 13 13, 0 | 1.6921253+002  | 1.6878407+002 | 2.8498487+004 | 4.8131046+006 |
| 14 0,14  | -2.8102863+001 | 3.7103808+000 | 4.1518251+001 | 7.7700946+002 |
| 14 1,14  | -2.8102859+001 | 3.7104264+000 | 4.1516225+001 | 7.7713697+002 |
| 14 1,13  | -1.0992058+001 | 1.0553767+001 | 1.8730188+002 | 4.6792054+003 |
| 14 2,13  | -1.0991718+001 | 1.0556763+001 | 1.8723915+002 | 4.6831912+003 |
| 14 2,12  | 4.4538471+000  | 1.6073396+001 | 4.2406264+002 | 1.3829523+004 |
| 14 3,12  | 4.4641725+000  | 1.6154460+001 | 4.2408168+002 | 1.3897066+004 |
| 14 3,11  | 1.7996670+001  | 1.9386464+001 | 6.6443578+002 | 2.6779460+004 |
| 14 4,11  | 1.8162682+001  | 2.0501098+001 | 6.8535293+002 | 2.7939440+004 |
| 14 4,10  | 2.8838532+001  | 1.7897173+001 | 7.2470704+002 | 3.4132322+004 |
| 14 5,10  | 3.0226849+001  | 2.4888699+001 | 9.6290284+002 | 4.5829299+004 |
| 14 5, 9  | 3.6352354+001  | 1.6340078+001 | 6.7102018+002 | 3.4723906+004 |
| 14 6, 9  | 4.1546856+001  | 3.2371233+001 | 1.4294216+003 | 7.5975039+004 |
| 14 6, 8  | 4.3504836+001  | 2.5904213+001 | 1.1241572+003 | 6.0773738+004 |
| 14 7, 8  | 5.3657312+001  | 4.4581353+001 | 2.3648454+003 | 1.4207255+005 |
| 14 7, 7  | 5.3946118+001  | 4.3064159+001 | 2.2715503+003 | 1.3648051+005 |
| 14 8, 7  | 6.7667849+001  | 6.0252598+001 | 3.9600788+003 | 2.7906582+005 |
| 14 8, 6  | 6.7691275+001  | 6.0096903+001 | 3.9476944+003 | 2.7815610+005 |
| 14 9, 6  | 8.3869558+001  | 7.8061167+001 | 6.3562626+003 | 5.3643679+005 |
| 14 9, 5  | 8.3870773+001  | 7.8051649+001 | 6.3553021+003 | 5.3634995+005 |
| 14 10, 5 | 1.0222289+002  | 9.7732713+001 | 9.7453254+003 | 9.8864411+005 |
| 14 10, 4 | 1.0222293+002  | 9.7732337+001 | 9.7452783+003 | 9.8863891+005 |
| 14 11, 4 | 1.2266691+002  | 1.1930367+002 | 1.4362693+004 | 1.7423002+006 |
| 14 11, 3 | 1.2266691+002  | 1.1930366+002 | 1.4362691+004 | 1.7423000+006 |
| 14 12, 3 | 1.4516327+002  | 1.4281742+002 | 2.0471276+004 | 2.9428366+006 |
| 14 12, 2 | 1.4516327+002  | 1.4281742+002 | 2.0471276+004 | 2.9428365+006 |
| 14 13, 2 | 1.6968865+002  | 1.6830023+002 | 2.8358699+004 | 4.7825020+006 |

TABLE II.--EXPECTATION VALUES--CONTINUED

KAPPA = -0.400000 --CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 14 13, 1 | 1.6968865+002  | 1.6830023+002 | 2.8358699+004 | 4.7825020+006 |
| 14 14, 1 | 1.9622817+002  | 1.9576818+002 | 3.8337307+004 | 7.5093358+006 |
| 14 14, 0 | 1.9622817+002  | 1.9576818+002 | 3.8337307+004 | 7.5093358+006 |
| 15 0,15  | -3.2752220+001 | 3.9850478+000 | 4.7864032+001 | 9.6126618+002 |
| 15 1,15  | -3.2752218+001 | 3.9850636+000 | 4.7863211+001 | 9.6132586+002 |
| 15 1,14  | -1.4348721+001 | 1.1385387+001 | 2.1767570+002 | 5.8569317+003 |
| 15 2,14  | -1.4348600+001 | 1.1386525+001 | 2.1764538+002 | 5.8590738+003 |
| 15 2,13  | 2.4060046+000  | 1.7515329+001 | 4.9936869+002 | 1.7624299+004 |
| 15 3,13  | 2.4100281+000  | 1.7549704+001 | 4.9924255+002 | 1.7663170+004 |
| 15 3,12  | 1.7338466+001  | 2.1790980+001 | 8.0885566+002 | 3.5483855+004 |
| 15 4,12  | 1.7412026+001  | 2.2340659+001 | 8.1806281+002 | 3.6163374+004 |
| 15 4,11  | 2.9891769+001  | 2.1955081+001 | 9.7787488+002 | 5.0357060+004 |
| 15 5,11  | 3.0644010+001  | 2.6468310+001 | 1.1317245+003 | 5.8946741+004 |
| 15 5,10  | 3.8969294+001  | 1.8228223+001 | 8.6650143+002 | 4.9870677+004 |
| 15 6,10  | 4.2673728+001  | 3.2709018+001 | 1.5651919+003 | 9.1340050+004 |
| 15 6, 9  | 4.6120060+001  | 2.3444004+001 | 1.1129462+003 | 6.7242141+004 |
| 15 7, 9  | 5.4913031+001  | 4.3778438+001 | 2.4277760+003 | 1.5706113+005 |
| 15 7, 8  | 5.5604120+001  | 4.0412757+001 | 2.2171974+003 | 1.4375439+005 |
| 15 8, 8  | 6.8759004+001  | 5.9177956+001 | 3.9736784+003 | 2.9368593+005 |
| 15 8, 7  | 6.8830341+001  | 5.8716498+001 | 3.9367504+003 | 2.9088881+005 |
| 15 9, 7  | 8.4779416+001  | 7.7116785+001 | 6.3430422+003 | 5.5043416+005 |
| 15 9, 6  | 8.4784043+001  | 7.7081015+001 | 6.3394275+003 | 5.5010192+005 |
| 15 10, 6 | 1.0299870+002  | 9.6933458+001 | 9.7070326+003 | 9.9983319+005 |
| 15 10, 5 | 1.0299890+002  | 9.6931658+001 | 9.7068071+003 | 9.9980808+005 |
| 15 11, 5 | 1.2334584+002  | 1.1860945+002 | 1.4295617+004 | 1.7472103+006 |
| 15 11, 4 | 1.2334585+002  | 1.1860939+002 | 1.4295608+004 | 1.7472091+006 |
| 15 12, 4 | 1.4576987+002  | 1.4219951+002 | 2.0371675+004 | 2.9370200+006 |
| 15 12, 3 | 1.4576987+002  | 1.4219951+002 | 2.0371675+004 | 2.9370199+006 |
| 15 13, 3 | 1.7023959+002  | 1.6773998+002 | 2.8223190+004 | 4.7604982+006 |
| 15 13, 2 | 1.7023959+002  | 1.6773998+002 | 2.8223190+004 | 4.7604982+006 |
| 15 14, 2 | 1.9673527+002  | 1.9525288+002 | 3.8162714+004 | 7.4645784+006 |
| 15 14, 1 | 1.9673527+002  | 1.9525288+002 | 3.8162714+004 | 7.4645784+006 |
| 15 15, 1 | 2.2524382+002  | 2.2475228+002 | 5.0527544+004 | 1.1361665+007 |
| 15 15, 0 | 2.2524382+002  | 2.2475228+002 | 5.0527544+004 | 1.1361665+007 |

KAPPA = -- 0.500000

|        |                |               |               |               |
|--------|----------------|---------------|---------------|---------------|
| 2 0, 2 | -6.0315015-002 | 5.8549313-002 | 2.3419725-001 | 9.3678901-001 |
| 2 1, 2 | 5.7142857-001  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 1, 1 | 1.4285714+000  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 2, 1 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 2 2, 0 | 4.0603150+000  | 3.9414507+000 | 1.5765803+001 | 6.3063211+001 |
| 3 0, 3 | -2.8571429-001 | 2.5000000-001 | 1.0000000+000 | 4.0000000+000 |
| 3 1, 3 | 1.0842876-001  | 1.0308567+000 | 1.3085672+000 | 3.8079617+000 |
| 3 1, 2 | 1.8145398+000  | 1.0471529+000 | 1.4715292+000 | 5.2909162+000 |
| 3 2, 2 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 3 2, 1 | 4.2857143+000  | 3.7500000+000 | 1.5000000+001 | 6.0000000+001 |
| 3 3, 1 | 9.0344284+000  | 8.9691433+000 | 8.0691433+001 | 7.2619204+002 |
| 3 3, 0 | 9.0426030+000  | 8.9528471+000 | 8.0528471+001 | 7.2470908+002 |
| 4 0, 4 | -7.7486302-001 | 5.6633952-001 | 2.3201162+000 | 1.0156595+001 |
| 4 1, 4 | -5.6301793-001 | 1.1109127+000 | 2.1091270+000 | 1.1093056+001 |
| 4 1, 3 | 2.2384214+000  | 1.2188233+000 | 3.1882329+000 | 2.0912920+001 |
| 4 2, 3 | 3.9525684+000  | 4.0470596+000 | 1.6941191+001 | 7.9812009+001 |
| 4 2, 2 | 4.7265165+000  | 3.4834723+000 | 1.4672402+001 | 7.0505812+001 |
| 4 3, 2 | 9.1344465+000  | 8.8890873+000 | 7.9890873+001 | 7.1890694+002 |
| 4 3, 1 | 9.1901500+000  | 8.7811767+000 | 7.8811767+001 | 7.0908708+002 |
| 4 4, 1 | 1.6047432+001  | 1.5952940+001 | 2.5505881+002 | 4.0801880+003 |
| 4 4, 0 | 1.6048346+001  | 1.5950188+001 | 2.5500748+002 | 4.0793376+003 |
| 5 0, 5 | -1.5733402+000 | 9.2044599-001 | 3.9883570+000 | 2.0858596+001 |
| 5 1, 5 | -1.4713690+000 | 1.2450790+000 | 3.4661475+000 | 2.3839689+001 |
| 5 1, 4 | 2.6034000+000  | 1.6292541+000 | 7.3475379+000 | 6.0187023+001 |
| 5 2, 4 | 3.8190550+000  | 4.1756479+000 | 1.9512959+001 | 1.2301771+002 |

TABLE II.—EXPECTATION VALUES—CONTINUED

| KAPPA = -0.50000 —CONTINUED |      |                |               |               |               |
|-----------------------------|------|----------------|---------------|---------------|---------------|
| 5                           | 2, 3 | 5.3843040+000  | 3.2792497+000 | 1.5972181+001 | 1.0957163+002 |
| 5                           | 3, 3 | 9.2708501+000  | 8.8130701+000 | 8.0507465+001 | 7.6017610+002 |
| 5                           | 3, 2 | 9.4817030+000  | 8.4292668+000 | 7.6637213+001 | 7.2412233+002 |
| 5                           | 4, 2 | 1.6180945+001  | 1.5824352+001 | 2.5248704+002 | 4.0369823+003 |
| 5                           | 4, 1 | 1.6189036+001  | 1.5800304+001 | 2.5203946+002 | 4.0295698+003 |
| 5                           | 5, 1 | 2.5057662+001  | 2.4941851+001 | 6.2302639+002 | 1.5570984+004 |
| 5                           | 5, 0 | 2.5057754+001  | 2.4941479+001 | 6.2301525+002 | 1.5570691+004 |
| 6                           | 0, 6 | -2.6835647+000 | 1.2525422+000 | 5.9107061+000 | 3.8148169+001 |
| 6                           | 1, 6 | -2.6379693+000 | 1.4253754+000 | 5.3425889+000 | 4.2818381+001 |
| 6                           | 1, 5 | 2.7877618+000  | 2.3591904+000 | 1.5028241+001 | 1.3995813+002 |
| 6                           | 2, 5 | 3.5557275+000  | 4.4163784+000 | 2.4355886+001 | 2.0548900+002 |
| 6                           | 2, 4 | 6.2000704+000  | 3.2778274+000 | 2.0571322+001 | 2.0299106+002 |
| 6                           | 3, 4 | 9.4267344+000  | 8.7869522+000 | 8.3851640+001 | 8.8398679+002 |
| 6                           | 3, 3 | 1.0000000+001  | 7.8571429+000 | 7.4285714+001 | 7.9000000+002 |
| 6                           | 4, 3 | 1.6376573+001  | 1.5652025+001 | 2.5119410+002 | 4.0996823+003 |
| 6                           | 4, 2 | 1.6415786+001  | 1.5538078+001 | 2.4906990+002 | 4.0641066+003 |
| 6                           | 5, 2 | 2.5211235+001  | 2.4787672+001 | 6.1780577+002 | 1.5428195+004 |
| 6                           | 5, 1 | 2.5212238+001  | 2.4783667+001 | 6.1768604+002 | 1.5425042+004 |
| 6                           | 6, 1 | 3.6067699+001  | 3.5931597+001 | 1.2924500+003 | 4.6510829+004 |
| 6                           | 6, 0 | 3.6067708+001  | 3.5931553+001 | 1.2924481+003 | 4.6510754+004 |
| 7                           | 0, 7 | -4.0957753+000 | 1.5528569+000 | 8.1281927+000 | 6.3852285+001 |
| 7                           | 1, 7 | -4.0763722+000 | 1.6380250+000 | 7.6664355+000 | 6.9099343+001 |
| 7                           | 1, 6 | 2.6854578+000  | 3.3389608+000 | 2.6140545+001 | 2.7530935+002 |
| 7                           | 2, 6 | 3.1186856+000  | 4.7855601+000 | 3.1894102+001 | 3.3819060+002 |
| 7                           | 2, 5 | 7.0778835+000  | 3.6139754+000 | 3.0941022+001 | 3.9844560+002 |
| 7                           | 3, 5 | 9.5704807+000  | 8.8668482+000 | 9.1434167+001 | 1.1303587+003 |
| 7                           | 3, 4 | 1.0802762+001  | 7.1891574+000 | 7.3654492+001 | 9.4254903+002 |
| 7                           | 4, 4 | 1.6641241+001  | 1.5457028+001 | 2.5267105+002 | 4.3352687+003 |
| 7                           | 4, 3 | 1.6777706+001  | 1.5076320+001 | 2.4552067+002 | 4.2121116+003 |
| 7                           | 5, 3 | 2.5428105+001  | 2.4573733+001 | 6.1370553+002 | 1.5488808+004 |
| 7                           | 5, 2 | 2.5433993+001  | 2.4550492+001 | 6.1301139+002 | 1.5470423+004 |
| 7                           | 6, 2 | 3.6240073+001  | 3.5757412+001 | 1.2834348+003 | 4.6142541+004 |
| 7                           | 6, 1 | 3.6240186+001  | 3.5756847+001 | 1.2834101+003 | 4.6141591+004 |
| 7                           | 7, 1 | 4.9077787+001  | 4.8921394+001 | 2.3951939+003 | 1.1731573+005 |
| 7                           | 7, 0 | 4.9077788+001  | 4.8921389+001 | 2.3951936+003 | 1.1731572+005 |
| 8                           | 0, 8 | -5.8020493+000 | 1.8304359+000 | 1.0699312+001 | 9.9341561+001 |
| 8                           | 1, 8 | -5.7940760+000 | 1.8701662+000 | 1.0381117+001 | 1.0413877+002 |
| 8                           | 1, 7 | 2.2465151+000  | 4.3869216+000 | 3.9562425+001 | 4.7510448+002 |
| 8                           | 2, 7 | 2.4691696+000  | 5.2789604+000 | 4.2241254+001 | 5.3085911+002 |
| 8                           | 2, 6 | 7.8940115+000  | 4.4298171+000 | 5.0359544+001 | 7.7507526+002 |
| 8                           | 3, 6 | 9.6590315+000  | 9.1066152+000 | 1.0476821+002 | 1.5443593+003 |
| 8                           | 3, 5 | 1.1879473+001  | 6.6855256+000 | 7.8452256+001 | 1.2505461+003 |
| 8                           | 4, 5 | 1.6970527+001  | 1.5287021+001 | 2.5902904+002 | 4.8270017+003 |
| 8                           | 4, 4 | 1.7346959+001  | 1.4309582+001 | 2.4038013+002 | 4.4899451+003 |
| 8                           | 5, 4 | 2.5722867+001  | 2.4295480+001 | 6.1192533+002 | 1.5857860+004 |
| 8                           | 5, 3 | 2.5747537+001  | 2.4199886+001 | 6.0906427+002 | 1.5780934+004 |
| 8                           | 6, 3 | 3.6472383+001  | 3.5522862+001 | 1.2755991+003 | 4.6140145+004 |
| 8                           | 6, 2 | 3.6473158+001  | 3.5519008+001 | 1.2754304+003 | 4.6133647+004 |
| 8                           | 7, 2 | 4.9269320+001  | 4.8727738+001 | 2.3809253+003 | 1.1649764+005 |
| 8                           | 7, 1 | 4.9269332+001  | 4.8727667+001 | 2.3809210+003 | 1.1649742+005 |
| 8                           | 8, 1 | 6.4087920+001  | 6.3911157+001 | 4.0871306+003 | 2.6146199+005 |
| 8                           | 8, 0 | 6.4087920+001  | 6.3911157+001 | 4.0871306+003 | 2.6146199+005 |
| 9                           | 0, 9 | -7.7979872+000 | 2.0949348+000 | 1.3655333+001 | 1.4577534+002 |
| 9                           | 1, 9 | -7.7947949+000 | 2.1127266+000 | 1.3458808+001 | 1.4957655+002 |
| 9                           | 1, 8 | 1.4704298+000  | 5.3776894+000 | 5.4466224+001 | 7.4585763+002 |
| 9                           | 2, 8 | 1.5772554+000  | 5.8746959+000 | 5.5248079+001 | 7.9259866+002 |
| 9                           | 2, 7 | 8.5106656+000  | 5.7856971+000 | 8.1296823+001 | 1.4298195+003 |
| 9                           | 3, 7 | 9.6430970+000  | 9.5455180+000 | 1.2511337+002 | 2.1739590+003 |
| 9                           | 3, 6 | 1.3152793+001  | 6.5902071+000 | 9.3446795+001 | 1.8365436+003 |
| 9                           | 4, 6 | 1.7345143+001  | 1.5212058+001 | 2.7291448+002 | 5.6764396+003 |
| 9                           | 4, 5 | 1.8205941+001  | 1.3224715+001 | 2.3402456+002 | 4.9251091+003 |
| 9                           | 5, 5 | 2.6107309+001  | 2.3964678+001 | 6.1428178+002 | 1.6662818+004 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.50000 —CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 9 5, 4   | 2.6189438+001  | 2.3655584+001 | 6.0497461+002 | 1.6405733+004 |
| 9 6, 4   | 3.6778626+001  | 3.5215456+001 | 1.2699608+003 | 4.6661463+004 |
| 9 6, 3   | 3.6782404+001  | 3.5196870+001 | 1.2691473+003 | 4.6629843+004 |
| 9 7, 3   | 4.9517733+001  | 4.8476188+001 | 2.3680107+003 | 1.1629618+005 |
| 9 7, 2   | 4.9517826+001  | 4.8475630+001 | 2.3679770+003 | 1.1629440+005 |
| 9 8, 2   | 6.4298976+001  | 6.3697791+001 | 4.0658767+003 | 2.5982950+005 |
| 9 8, 1   | 6.4298977+001  | 6.3697783+001 | 4.0658760+003 | 2.5982945+005 |
| 9 9, 1   | 8.1098084+001  | 8.0900889+001 | 6.5481354+003 | 5.3016246+005 |
| 9 9, 0   | 8.1098084+001  | 8.0900889+001 | 6.5481354+003 | 5.3016246+005 |
| 10 0,10  | -1.0081464+001 | 2.3526099+000 | 1.7004637+001 | 2.0433001+002 |
| 10 1,10  | -1.0080211+001 | 2.3603282+000 | 1.6892482+001 | 2.0703890+002 |
| 10 1, 9  | 3.7394183-001  | 6.2857508+000 | 7.0730477+001 | 1.0953687+003 |
| 10 2, 9  | 4.2270720-001  | 6.5431550+000 | 7.0648775+001 | 1.1326716+003 |
| 10 2, 8  | 8.8143195+000  | 7.5282598+000 | 1.2281704+002 | 2.4280196+003 |
| 10 3, 8  | 9.4731679+000  | 1.0198105+001 | 1.5321528+002 | 3.0666024+003 |
| 10 3, 7  | 1.4503777+001  | 7.0980356+000 | 1.2461072+002 | 2.9087639+003 |
| 10 4, 7  | 1.7730756+001  | 1.5311030+001 | 2.9724025+002 | 7.0043005+003 |
| 10 4, 6  | 1.9406012+001  | 1.2044041+001 | 2.3117218+002 | 5.6274317+003 |
| 10 5, 6  | 2.6586068+001  | 2.3619659+001 | 6.2349433+002 | 1.8063075+004 |
| 10 5, 5  | 2.6815074+001  | 2.2797382+001 | 5.9844643+002 | 1.7342451+004 |
| 10 6, 5  | 3.7173652+001  | 3.4826348+001 | 1.2678417+003 | 4.7883618+004 |
| 10 6, 4  | 3.7188238+001  | 3.4755696+001 | 1.2647427+003 | 4.7761215+004 |
| 10 7, 4  | 4.9834923+001  | 4.8154336+001 | 2.3574884+003 | 1.1694654+005 |
| 10 7, 3  | 4.9835440+001  | 4.8151261+001 | 2.3573029+003 | 1.1693668+005 |
| 10 8, 3  | 6.4564615+001  | 6.3428866+001 | 4.0461855+003 | 2.5917662+005 |
| 10 8, 2  | 6.4564625+001  | 6.3428793+001 | 4.0461796+003 | 2.5917621+005 |
| 10 9, 2  | 8.1328909+001  | 8.0667571+001 | 6.5179096+003 | 5.2716175+005 |
| 10 9, 1  | 8.1328909+001  | 8.0667570+001 | 6.5179095+003 | 5.2716174+005 |
| 10 10, 1 | 1.0010827+002  | 9.9890601+001 | 9.9820837+003 | 9.9776279+005 |
| 10 10, 0 | 1.0010827+002  | 9.9890601+001 | 9.9820837+003 | 9.9776279+005 |
| 11 0,11  | -1.2651512+001 | 2.6068805+000 | 2.0745011+001 | 2.7628092+002 |
| 11 1,11  | -1.2651029+001 | 2.6101446+000 | 2.0684745+001 | 2.7805910+002 |
| 11 1,10  | -1.0280190+000 | 7.1305149+000 | 8.8533913+001 | 1.5325775+003 |
| 11 2,10  | -1.0065688+000 | 7.2568800+000 | 8.8197146+001 | 1.5608120+003 |
| 11 2, 9  | 8.7525337+000  | 9.3660717+000 | 1.7114421+002 | 3.7768456+003 |
| 11 3, 9  | 9.1051603+000  | 1.1050409+001 | 1.8917162+002 | 4.2658318+003 |
| 11 3, 8  | 1.5787770+001  | 8.3711311+000 | 1.7884487+002 | 4.7777413+003 |
| 11 4, 8  | 1.8081121+001  | 1.5654563+001 | 3.3478678+002 | 8.9482561+003 |
| 11 4, 7  | 2.0926231+001  | 1.1162662+001 | 2.4099256+002 | 6.8577508+003 |
| 11 5, 7  | 2.7152028+001  | 2.3329724+001 | 6.4332615+002 | 2.0261012+004 |
| 11 5, 6  | 2.7701288+001  | 2.1501970+001 | 5.8660873+002 | 1.8537852+004 |
| 11 6, 6  | 3.7671499+001  | 3.4357793+001 | 1.2711612+003 | 5.0012907+004 |
| 11 6, 5  | 3.7718733+001  | 3.4134077+001 | 1.2612995+003 | 4.9613618+004 |
| 11 7, 5  | 5.0234211+001  | 4.7748907+001 | 2.3505028+003 | 1.1870023+005 |
| 11 7, 4  | 5.0236473+001  | 4.7735577+001 | 2.3496987+003 | 1.1865704+005 |
| 11 8, 4  | 6.4894920+001  | 6.3093606+001 | 4.0292050+003 | 2.5984369+005 |
| 11 8, 3  | 6.4894985+001  | 6.3093152+001 | 4.0291689+003 | 2.5984117+005 |
| 11 9, 3  | 8.1612590+001  | 8.0380519+001 | 6.4894633+003 | 5.2564316+005 |
| 11 9, 2  | 8.1612591+001  | 8.0380510+001 | 6.4894624+003 | 5.2564308+005 |
| 11 10, 2 | 1.0035903+002  | 9.9637157+001 | 9.9406499+003 | 9.9259433+005 |
| 11 10, 1 | 1.0035903+002  | 9.9637157+001 | 9.9406499+003 | 9.9259433+005 |
| 11 11, 1 | 1.2111847+002  | 1.2088030+002 | 1.4616851+004 | 1.7678577+006 |
| 11 11, 0 | 1.2111847+002  | 1.2088030+002 | 1.4616851+004 | 1.7678577+006 |
| 12 0,12  | -1.5507702+001 | 2.8594678+000 | 2.4871524+001 | 3.6299187+002 |
| 12 1,12  | -1.5507518+001 | 2.8608197+000 | 2.4840645+001 | 3.6408486+002 |
| 12 1,11  | -2.7262027+000 | 7.9360529+000 | 1.0805366+002 | 2.0668505+003 |
| 12 2,11  | -2.7170354+000 | 7.9955999+000 | 1.0772818+002 | 2.0870562+003 |
| 12 2,10  | 8.3272972+000  | 1.1098581+001 | 2.2328726+002 | 5.4652641+003 |
| 12 3,10  | 8.5042776+000  | 1.2065829+001 | 2.3253002+002 | 5.8098105+003 |
| 12 3, 9  | 1.6852718+001  | 1.0434254+001 | 2.6038650+002 | 7.7745356+003 |
| 12 4, 9  | 1.8343419+001  | 1.6289463+001 | 3.8773558+002 | 1.1655309+004 |
| 12 4, 8  | 2.2673861+001  | 1.0936743+001 | 2.7449643+002 | 9.0587496+003 |

TABLE II.—EXPECTATION VALUES—CONTINUED

| <i>KAPPA</i> = -0.500000—CONTINUED |                |               |               |               |
|------------------------------------|----------------|---------------|---------------|---------------|
| 12 5, 8                            | 2.7783232+001  | 2.3188285+001 | 6.7841641+002 | 2.3510672+004 |
| 12 5, 7                            | 2.8930893+001  | 1.9792874+001 | 5.7026562+002 | 2.0002671+004 |
| 12 6, 7                            | 3.8282442+001  | 3.3833870+001 | 1.2828795+003 | 5.3304304+004 |
| 12 6, 6                            | 3.8415050+001  | 3.3226346+001 | 1.2558633+003 | 5.2171982+004 |
| 12 7, 6                            | 5.0730045+001  | 4.7248003+001 | 2.3484114+003 | 1.2182742+005 |
| 12 7, 5                            | 5.0738334+001  | 4.7199818+001 | 2.3454990+003 | 1.2166848+005 |
| 12 8, 5                            | 6.5301190+001  | 6.2679689+001 | 4.0161281+003 | 2.6218916+005 |
| 12 8, 4                            | 6.5301508+001  | 6.2677485+001 | 4.0159530+003 | 2.6217686+005 |
| 12 9, 4                            | 8.1957827+001  | 8.0030456+001 | 6.4640769+003 | 5.2608177+005 |
| 12 9, 3                            | 8.1957835+001  | 8.0030394+001 | 6.4640706+003 | 5.2608122+005 |
| 12 10, 3                           | 1.0066131+002  | 9.9331396+001 | 9.9012148+003 | 9.8958091+005 |
| 12 10, 2                           | 1.0066131+002  | 9.9331395+001 | 9.9012147+003 | 9.8958090+005 |
| 12 11, 2                           | 1.2138928+002  | 1.2060661+002 | 1.4561725+004 | 1.7594122+006 |
| 12 11, 1                           | 1.2138928+002  | 1.2060661+002 | 1.4561725+004 | 1.7594122+006 |
| 12 12, 1                           | 1.4412868+002  | 1.4386998+002 | 2.0704314+004 | 2.9801273+006 |
| 12 12, 0                           | 1.4412868+002  | 1.4386998+002 | 2.0704314+004 | 2.9801273+006 |
| 13 0,13                            | -1.8649839+001 | 3.1112024+000 | 2.9379814+001 | 4.6587739+002 |
| 13 1,13                            | -1.8649770+001 | 3.1117526+000 | 2.9364593+001 | 4.6651401+002 |
| 13 1,12                            | -4.7156332+000 | 8.7194188+000 | 1.2939268+002 | 2.7077760+003 |
| 13 2,12                            | -4.7118050+000 | 8.7465801+000 | 1.2915590+002 | 2.7214579+003 |
| 13 2,11                            | 7.5615246+000  | 1.2679975+001 | 2.7845471+002 | 7.5021779+003 |
| 13 3,11                            | 7.6461684+000  | 1.3198170+001 | 2.8256744+002 | 7.7322677+003 |
| 13 3,10                            | 1.7577779+001  | 1.3033782+001 | 3.6575645+002 | 1.2056741+004 |
| 13 4,10                            | 1.8464514+001  | 1.7228063+001 | 4.5724528+002 | 1.5268782+004 |
| 13 4, 9                            | 2.4510896+001  | 1.1624424+001 | 3.4382767+002 | 1.2901802+004 |
| 13 5, 9                            | 2.8442724+001  | 2.3295705+001 | 7.3377738+002 | 2.8119133+004 |
| 13 5, 8                            | 3.0550594+001  | 1.8003106+001 | 5.5971942+002 | 2.2065735+004 |
| 13 6, 8                            | 3.9008934+001  | 3.3310697+001 | 1.3074541+003 | 5.8089877+004 |
| 13 6, 7                            | 3.9337762+001  | 3.1878653+001 | 1.2429023+003 | 5.5260654+004 |
| 13 7, 7                            | 5.1337163+001  | 4.6646219+001 | 2.3530568+003 | 1.2662873+005 |
| 13 7, 6                            | 5.1363503+001  | 4.6495870+001 | 2.3439311+003 | 1.2611937+005 |
| 13 8, 6                            | 6.5795987+001  | 6.2173490+001 | 4.0081903+003 | 2.6658530+005 |
| 13 8, 5                            | 6.5797285+001  | 6.2164583+001 | 4.0074821+003 | 2.6653502+005 |
| 13 9, 5                            | 8.2374277+001  | 7.9606773+001 | 6.4430695+003 | 5.2897603+005 |
| 13 9, 4                            | 8.2374318+001  | 7.9606443+001 | 6.4430361+003 | 5.2897305+005 |
| 13 10, 4                           | 1.0102275+002  | 9.8965214+001 | 9.8651936+003 | 9.8936433+005 |
| 13 10, 3                           | 1.0102275+002  | 9.8965206+001 | 9.8651926+003 | 9.8936422+005 |
| 13 11, 3                           | 1.2171054+002  | 1.2028172+002 | 1.4508817+004 | 1.7539993+006 |
| 13 11, 2                           | 1.2171054+002  | 1.2028172+002 | 1.4508817+004 | 1.7539993+006 |
| 13 12, 2                           | 1.4441963+002  | 1.4357596+002 | 2.0632761+004 | 2.9669143+006 |
| 13 12, 1                           | 1.4441963+002  | 1.4357596+002 | 2.0632761+004 | 2.9669143+006 |
| 13 13, 1                           | 1.6913890+002  | 1.6885966+002 | 2.8520347+004 | 4.8178931+006 |
| 13 13, 0                           | 1.6913890+002  | 1.6885966+002 | 2.8520347+004 | 4.8178931+006 |
| 14 0,14                            | -2.2077834+001 | 3.3624790+000 | 3.4266886+001 | 5.8637104+002 |
| 14 1,14                            | -2.2077808+001 | 3.3626996+000 | 3.4259621+001 | 5.8672553+002 |
| 14 1,13                            | -6.9937882+000 | 9.4906867+000 | 1.5259610+002 | 3.4651392+003 |
| 14 2,13                            | -6.9922198+000 | 9.5027498+000 | 1.5244629+002 | 3.4739357+003 |
| 14 2,12                            | 6.4766615+000  | 1.4140858+001 | 3.3703454+002 | 9.9163622+003 |
| 14 3,12                            | 6.5156740+000  | 1.4404479+001 | 3.3857694+002 | 1.0064663+004 |
| 14 3,11                            | 1.7908341+001  | 1.5754540+001 | 4.8551319+002 | 1.7541279+004 |
| 14 4,11                            | 1.8396745+001  | 1.8446178+001 | 5.4326174+002 | 1.9914598+004 |
| 14 4,10                            | 2.6274610+001  | 1.3402407+001 | 4.6134406+002 | 1.9285025+004 |
| 14 5,10                            | 2.9081568+001  | 2.3738215+001 | 8.1406295+002 | 3.4435625+004 |
| 14 5, 9                            | 3.2530422+001  | 1.6675008+001 | 5.7420314+002 | 2.5546805+004 |
| 14 6, 9                            | 3.9841388+001  | 3.2879371+001 | 1.3510345+003 | 6.4808902+004 |
| 14 6, 8                            | 4.0567886+001  | 2.9953688+001 | 1.2165795+003 | 5.8588887+004 |
| 14 7, 8                            | 5.2068820+001  | 4.5953563+001 | 2.3672713+003 | 1.3346360+005 |
| 14 7, 7                            | 5.2143094+001  | 4.5540196+001 | 2.3420076+003 | 1.3201079+005 |
| 14 8, 7                            | 6.6393069+001  | 6.1561260+001 | 4.0067339+003 | 2.7341796+005 |
| 14 8, 6                            | 6.6397653+001  | 6.1530174+001 | 4.0042573+003 | 2.7323939+005 |
| 14 9, 6                            | 8.2872633+001  | 7.9097354+001 | 6.4277654+003 | 5.3484036+005 |
| 14 9, 5                            | 8.2872820+001  | 7.9095882+001 | 6.4276163+003 | 5.3482697+005 |
| 14 10, 5                           | 1.0145174+002  | 9.8529461+001 | 9.8340478+003 | 9.9261696+005 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.50000 —CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 14 10, 4 | 1.0145175+002  | 9.8529416+001 | 9.8340420+003 | 9.9261633+005 |
| 14 11, 4 | 1.2208907+002  | 1.1989846+002 | 1.4459679+004 | 1.7524623+006 |
| 14 11, 3 | 1.2208907+002  | 1.1989845+002 | 1.4459678+004 | 1.7524623+006 |
| 14 12, 3 | 1.4476016+002  | 1.4323165+002 | 2.0563650+004 | 2.9578530+006 |
| 14 12, 2 | 1.4476016+002  | 1.4323165+002 | 2.0563650+004 | 2.9578530+006 |
| 14 13, 2 | 1.6945004+002  | 1.6854523+002 | 2.8429385+004 | 4.7979617+006 |
| 14 13, 1 | 1.6945004+002  | 1.6854523+002 | 2.8429385+004 | 4.7979617+006 |
| 14 14, 1 | 1.9614912+002  | 1.9584933+002 | 3.8364826+004 | 7.5163947+006 |
| 14 14, 0 | 1.9614912+002  | 1.9584933+002 | 3.8364826+004 | 7.5163947+006 |
| 15 0,15  | -2.5791638+001 | 3.6134872+000 | 3.9530934+001 | 7.2590739+002 |
| 15 1,15  | -2.5791629+001 | 3.6135745+000 | 3.9527559+001 | 7.2609740+002 |
| 15 1,14  | -9.5594070+000 | 1.0255332+001 | 1.7767839+002 | 4.3488732+003 |
| 15 2,14  | -9.5587746+000 | 1.0260571+001 | 1.7759159+002 | 4.3542683+003 |
| 15 2,13  | 5.0869062+000  | 1.5523324+001 | 3.9960305+002 | 1.2745023+004 |
| 15 3,13  | 5.1043664+000  | 1.5652164+001 | 4.0002878+002 | 1.2838055+004 |
| 15 3,12  | 1.7848770+001  | 1.8311220+001 | 6.1212003+002 | 2.4090069+004 |
| 15 4,12  | 1.8101943+001  | 1.9891863+001 | 6.4470962+002 | 2.5694008+004 |
| 15 4,11  | 2.7799833+001  | 1.6247824+001 | 6.3298185+002 | 2.9046905+004 |
| 15 5,11  | 2.9644162+001  | 2.4569433+001 | 9.2276448+002 | 4.2825229+004 |
| 15 5,10  | 3.4764040+001  | 1.6286252+001 | 6.3558465+002 | 3.1733051+004 |
| 15 6,10  | 4.0755368+001  | 3.2656458+001 | 1.4211426+003 | 7.4026968+004 |
| 15 6, 9  | 4.2189044+001  | 2.7520424+001 | 1.1790275+003 | 6.2125139+004 |
| 15 7, 9  | 5.2933851+001  | 4.5207206+001 | 2.3955820+003 | 1.4279990+005 |
| 15 7, 8  | 5.3122339+001  | 4.4195239+001 | 2.3330945+003 | 1.3906948+005 |
| 15 8, 8  | 6.7107017+001  | 6.0832302+001 | 4.0134208+003 | 2.8309708+005 |
| 15 8, 7  | 6.7121383+001  | 6.0736358+001 | 4.0057493+003 | 2.8253246+005 |
| 15 9, 7  | 8.3464710+001  | 7.8488553+001 | 6.4194687+003 | 5.4419764+005 |
| 15 9, 6  | 8.3465433+001  | 7.8482892+001 | 6.4188949+003 | 5.4414557+005 |
| 15 10, 6 | 1.0195752+002  | 9.8013750+001 | 9.8092486+003 | 1.0000332+006 |
| 15 10, 5 | 1.0195755+002  | 9.8013527+001 | 9.8092205+003 | 1.0000301+006 |
| 15 11, 5 | 1.2253229+002  | 1.1944880+002 | 1.4415911+004 | 1.7556839+006 |
| 15 11, 4 | 1.2253229+002  | 1.1944879+002 | 1.4415910+004 | 1.7556837+006 |
| 15 12, 4 | 1.4515641+002  | 1.4283060+002 | 2.0498662+004 | 2.9540269+006 |
| 15 12, 3 | 1.4515641+002  | 1.4283060+002 | 2.0498662+004 | 2.9540269+006 |
| 15 13, 3 | 1.6981005+002  | 1.6818128+002 | 2.8341090+004 | 4.7835835+006 |
| 15 13, 2 | 1.6981005+002  | 1.6818128+002 | 2.8341090+004 | 4.7835835+006 |
| 15 14, 2 | 1.9648051+002  | 1.9551445+002 | 3.8251225+004 | 7.4872475+006 |
| 15 14, 1 | 1.9648051+002  | 1.9551445+002 | 3.8251225+004 | 7.4872475+006 |
| 15 15, 1 | 2.2515935+002  | 2.2483900+002 | 5.0561627+004 | 1.1371786+007 |
| 15 15, 0 | 2.2515935+002  | 2.2483900+002 | 5.0561627+004 | 1.1371786+007 |

KAPPA = - 0.600000

|        |                |               |               |               |
|--------|----------------|---------------|---------------|---------------|
| 2 0, 2 | -3.6700309-002 | 3.6038988-002 | 1.4415595-001 | 5.7662381-001 |
| 2 1, 2 | 6.6666667-001  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 1, 1 | 1.3333333+000  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 2, 1 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 2 2, 0 | 4.0367003+000  | 3.9639610+000 | 1.5855844+001 | 6.3423376+001 |
| 3 0, 3 | -1.7732422-001 | 1.6288269-001 | 6.5153077-001 | 2.6061231+000 |
| 3 1, 3 | 3.1201824-001  | 1.0195792+000 | 1.1957917+000 | 2.7817043+000 |
| 3 1, 2 | 1.6415005+000  | 1.0272668+000 | 1.2726685+000 | 3.4812832+000 |
| 3 2, 2 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 3 2, 1 | 4.1773242+000  | 3.8371173+000 | 1.5348469+001 | 6.1393877+001 |
| 3 3, 1 | 9.0213151+000  | 8.9804208+000 | 8.0804208+001 | 7.2721830+002 |
| 3 3, 0 | 9.0251662+000  | 8.9727332+000 | 8.0727332+001 | 7.2651872+002 |
| 4 0, 4 | -4.9652292-001 | 4.0142663-001 | 1.6300585+000 | 6.9098660+000 |
| 4 1, 4 | -1.9569178-001 | 1.0729122+000 | 1.7291223+000 | 7.6350130+000 |
| 4 1, 3 | 2.0000000+000  | 1.1250000+000 | 2.2500000+000 | 1.2375000+001 |
| 4 2, 3 | 3.9712622+000  | 4.0286008+000 | 1.6572016+001 | 7.3609861+001 |
| 4 2, 2 | 4.4674509+000  | 3.6281786+000 | 1.4960696+001 | 6.7010497+001 |
| 4 3, 2 | 9.0845807+000  | 8.9270878+000 | 8.0270878+001 | 7.2236499+002 |

TABLE II.--EXPECTATION VALUES--CONTINUED

| KAPPA = -0.600000--CONTINUED |                |               |               |               |
|------------------------------|----------------|---------------|---------------|---------------|
| 4 3, 1                       | 9.1111111+000  | 8.8750000+000 | 7.9750000+001 | 7.1762500+002 |
| 4 4, 1                       | 1.6028738+001  | 1.5971399+001 | 2.5542798+002 | 4.0863901+003 |
| 4 4, 0                       | 1.6029072+001  | 1.5970395+001 | 2.5540925+002 | 4.0860796+003 |
| 5 0, 5                       | -1.0441530+000 | 7.0712917-001 | 2.9814940+000 | 1.4373613+001 |
| 5 1, 5                       | -8.7711200-001 | 1.1676643+000 | 2.6833034+000 | 1.6490565+001 |
| 5 1, 4                       | 2.3534576+000  | 1.3624532+000 | 4.6433167+000 | 3.4640710+001 |
| 5 2, 4                       | 3.8898991+000  | 4.1081170+000 | 1.8162339+001 | 1.0032730+002 |
| 5 2, 3                       | 4.9310751+000  | 3.4098704+000 | 1.5346358+001 | 8.8695452+001 |
| 5 3, 3                       | 9.1756233+000  | 8.8673457+000 | 8.0505724+001 | 7.4605781+002 |
| 5 3, 2                       | 9.2783608+000  | 8.6726620+000 | 7.8548864+001 | 7.2799077+002 |
| 5 4, 2                       | 1.6110101+001  | 1.5891883+001 | 2.5383766+002 | 4.0596727+003 |
| 5 4, 1                       | 1.6113078+001  | 1.5883000+001 | 2.5367215+002 | 4.0569309+003 |
| 5 5, 1                       | 2.5034822+001  | 2.4964990+001 | 6.2381097+002 | 1.5592452+004 |
| 5 5, 0                       | 2.5034848+001  | 2.4964885+001 | 6.2380782+002 | 1.5592369+004 |
| 6 0, 6                       | -1.8358688+000 | 1.0197879+000 | 4.5742311+000 | 2.6251899+001 |
| 6 1, 6                       | -1.7497302+000 | 1.3029101+000 | 4.0701423+000 | 3.0001266+001 |
| 6 1, 5                       | 2.6259570+000  | 1.8190886+000 | 9.3489425+000 | 8.1069041+001 |
| 6 2, 5                       | 3.7278229+000  | 4.2614311+000 | 2.1239507+001 | 1.5245044+002 |
| 6 2, 4                       | 5.5490764+000  | 3.2846972+000 | 1.7468487+001 | 1.3960329+002 |
| 6 3, 4                       | 9.2887603+000  | 8.8252359+000 | 8.2277153+001 | 8.1896425+002 |
| 6 3, 3                       | 9.5794539+000  | 8.3102000+000 | 7.7032555+001 | 7.6879763+002 |
| 6 4, 3                       | 1.6231307+001  | 1.5779697+001 | 2.5289658+002 | 4.0949265+003 |
| 6 4, 2                       | 1.6245921+001  | 1.5736652+001 | 2.5209380+002 | 4.0815381+003 |
| 6 5, 2                       | 2.5127637+001  | 2.4871854+001 | 6.2065270+002 | 1.5506034+004 |
| 6 5, 1                       | 2.5127922+001  | 2.4870711+001 | 6.2005133+004 | 1.5505133+004 |
| 6 6, 1                       | 3.6040870+001  | 3.5958872+001 | 1.2938639+003 | 4.6568623+004 |
| 6 6, 0                       | 3.6040872+001  | 3.5958863+001 | 1.2938635+003 | 4.6568607+004 |
| 7 0, 7                       | -2.8685775+000 | 1.3105979+000 | 6.3778902+000 | 4.3937140+001 |
| 7 1, 7                       | -2.8263846+000 | 1.4713556+000 | 5.8542587+000 | 4.8824998+001 |
| 7 1, 6                       | 2.7330516+000  | 2.5259976+000 | 1.6964781+001 | 1.6457822+002 |
| 7 2, 6                       | 3.4548865+000  | 4.5067265+000 | 2.6207710+001 | 2.3835812+002 |
| 7 2, 5                       | 6.2714507+000  | 3.3460272+000 | 2.2640787+001 | 2.4223111+002 |
| 7 3, 5                       | 9.4092121+000  | 8.8349390+000 | 8.6532567+001 | 9.6600626+002 |
| 7 3, 4                       | 1.0070305+001  | 7.7870186+000 | 7.5623176+001 | 8.5557184+002 |
| 7 4, 4                       | 1.6400189+001  | 1.5639142+001 | 2.5335923+002 | 4.2310299+003 |
| 7 4, 3                       | 1.6452177+001  | 1.5489368+001 | 2.5055374+002 | 4.1834300+003 |
| 7 5, 3                       | 2.5259103+001  | 2.4740962+001 | 6.1810626+002 | 1.5540734+004 |
| 7 5, 2                       | 2.5260796+001  | 2.4734241+001 | 6.1790518+002 | 1.5535417+004 |
| 7 6, 2                       | 3.6144925+001  | 3.5854132+001 | 1.2884331+003 | 4.6346612+004 |
| 7 6, 1                       | 3.6144950+001  | 3.5854007+001 | 1.2884276+003 | 4.6346402+004 |
| 7 7, 1                       | 4.9046959+001  | 4.8952744+001 | 2.3975069+003 | 1.1744844+005 |
| 7 7, 0                       | 4.9046959+001  | 4.8952743+001 | 2.3975069+003 | 1.1744843+005 |
| 8 0, 8                       | -4.1353404+000 | 1.5772138+000 | 8.4260199+000 | 6.8619531+001 |
| 8 1, 8                       | -4.1154129+000 | 1.6634398+000 | 7.9883224+000 | 7.3818524+001 |
| 8 1, 7                       | 2.6077458+000  | 3.4112931+000 | 2.7248321+001 | 2.9562518+002 |
| 8 2, 7                       | 3.0416692+000  | 4.8522191+000 | 3.3322739+001 | 3.6594758+002 |
| 8 2, 6                       | 7.0280973+000  | 3.6886292+000 | 3.2738654+001 | 4.3532282+002 |
| 8 3, 6                       | 9.5136965+000  | 8.9348601+000 | 9.4318346+001 | 1.2161431+003 |
| 8 3, 5                       | 1.0783342+001  | 7.2152717+000 | 7.5905355+001 | 1.0169533+003 |
| 8 4, 5                       | 1.6620090+001  | 1.5488284+001 | 2.5632305+002 | 4.5161521+003 |
| 8 4, 4                       | 1.6768830+001  | 1.5075519+001 | 2.4851883+002 | 4.3796094+003 |
| 8 5, 4                       | 2.5439145+001  | 2.4565344+001 | 6.1677656+002 | 1.5758498+004 |
| 8 5, 3                       | 2.5446339+001  | 2.4537091+001 | 6.1593029+002 | 1.5735921+004 |
| 8 6, 3                       | 3.6285164+001  | 3.5712909+001 | 1.2836899+003 | 4.6344329+004 |
| 8 6, 2                       | 3.6285337+001  | 3.5712049+001 | 1.2836522+003 | 4.6342877+004 |
| 8 7, 2                       | 4.9162571+001  | 4.8836356+001 | 2.3889168+003 | 1.1695554+005 |
| 8 7, 1                       | 4.9162573+001  | 4.8836344+001 | 2.3889160+003 | 1.1695550+005 |
| 8 8, 1                       | 6.4053076+001  | 6.3946589+001 | 4.0906643+003 | 2.6173357+005 |
| 8 8, 0                       | 6.4053076+001  | 6.3946589+001 | 4.0906643+003 | 2.6173357+005 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.600000—CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 9 0, 9   | -5.6308637+000 | 1.8262132+000 | 1.0756613+001 | 1.0125383+002 |
| 9 1, 9   | -5.6217022+000 | 1.8705522+000 | 1.0435836+001 | 1.0603915+002 |
| 9 1, 8   | 2.2193702+000  | 4.3464261+000 | 3.9384936+001 | 4.8010639+002 |
| 9 2, 8   | 2.4622248+000  | 5.2936713+000 | 4.2653132+001 | 5.4246698+002 |
| 9 2, 7   | 7.7324561+000  | 4.4102925+000 | 5.0111168+001 | 7.7861203+002 |
| 9 3, 7   | 9.5724357+000  | 9.1608968+000 | 1.0666858+002 | 1.6018400+003 |
| 9 3, 6   | 1.1706890+001  | 6.7796707+000 | 8.0567268+001 | 1.3051667+003 |
| 9 4, 6   | 1.6887132+001  | 1.5361224+001 | 2.6326504+002 | 5.0093150+003 |
| 9 4, 5   | 1.7246915+001  | 1.4422598+001 | 2.4523502+002 | 4.6790657+003 |
| 9 5, 5   | 2.5677587+001  | 2.4342846+001 | 6.1750512+002 | 1.6232151+004 |
| 9 5, 4   | 2.5702044+001  | 2.4248295+001 | 6.1466315+002 | 1.6155065+004 |
| 9 6, 4   | 3.6470166+001  | 3.5526756+001 | 1.2802116+003 | 4.6658111+004 |
| 9 6, 3   | 3.6471015+001  | 3.5522548+001 | 1.2800271+003 | 4.6650968+004 |
| 9 7, 3   | 4.9312467+001  | 4.8685290+001 | 2.3811294+003 | 1.1683336+005 |
| 9 7, 2   | 4.9312483+001  | 4.8685194+001 | 2.3811236+003 | 1.1683305+005 |
| 9 8, 2   | 6.4180477+001  | 6.3818349+001 | 4.0778702+003 | 2.6075011+005 |
| 9 8, 1   | 6.4180477+001  | 6.3818348+001 | 4.0778701+003 | 2.6075010+005 |
| 9 9, 1   | 8.1059213+001  | 8.0940415+001 | 6.5532611+003 | 5.3067161+005 |
| 9 9, 0   | 8.1059213+001  | 8.0940415+001 | 6.5532611+003 | 5.3067161+005 |
| 10 0,10  | -7.3520114+000 | 2.0643097+000 | 1.3391764+001 | 1.4268770+002 |
| 10 1,10  | -7.3478858+000 | 2.0863805+000 | 1.3176997+001 | 1.4664078+002 |
| 10 1, 9  | 1.5672599+000  | 5.2419489+000 | 5.2763142+001 | 7.2219388+002 |
| 10 2, 9  | 1.6959456+000  | 5.8163650+000 | 5.4109350+001 | 7.7474203+002 |
| 10 2, 8  | 8.2894311+000  | 5.5575134+000 | 7.6607561+001 | 1.3438688+003 |
| 10 3, 8  | 9.5519859+000  | 9.5399197+000 | 1.2446585+002 | 2.1578281+003 |
| 10 3, 7  | 1.2788564+001  | 6.6506725+000 | 9.2953997+001 | 1.8077795+003 |
| 10 4, 7  | 1.7188457+001  | 1.5305342+001 | 2.7599124+002 | 5.7817728+003 |
| 10 4, 6  | 1.7943654+001  | 1.3516231+001 | 2.4081945+002 | 5.0980547+003 |
| 10 5, 6  | 2.5982474+001  | 2.4081395+001 | 6.2151426+002 | 1.7049089+004 |
| 10 5, 5  | 2.6052882+001  | 2.3815611+001 | 6.1347241+002 | 1.6825307+004 |
| 10 6, 5  | 3.6709455+001  | 3.5287215+001 | 1.2786748+003 | 4.7394654+004 |
| 10 6, 4  | 3.6712783+001  | 3.5270877+001 | 1.2779574+003 | 4.7366612+004 |
| 10 7, 4  | 4.9503764+001  | 4.8492133+001 | 2.3747752+003 | 1.1722740+005 |
| 10 7, 3  | 4.9503854+001  | 4.8491596+001 | 2.3747428+003 | 1.1722568+005 |
| 10 8, 3  | 6.4340781+001  | 6.3656850+001 | 4.0660021+003 | 2.6035507+005 |
| 10 8, 2  | 6.4340782+001  | 6.3656841+001 | 4.0660013+003 | 2.6035501+005 |
| 10 9, 2  | 8.1198551+001  | 8.0800172+001 | 6.5350677+003 | 5.2886404+005 |
| 10 9, 1  | 8.1198551+001  | 8.0800172+001 | 6.5350677+003 | 5.2886404+005 |
| 10 10, 1 | 1.0006536+002  | 9.9934228+001 | 9.9892225+003 | 9.9865377+005 |
| 10 10, 0 | 1.0006536+002  | 9.9934228+001 | 9.9892225+003 | 9.9865377+005 |
| 11 0,11  | -9.2971146+000 | 2.2961799+000 | 1.6339423+001 | 1.9377346+002 |
| 11 1,11  | -9.2952872+000 | 2.3068852+000 | 1.6204927+001 | 1.9677585+002 |
| 11 1,10  | 6.6262010-001  | 6.0724656+000 | 6.7227894+001 | 1.0269432+003 |
| 11 2,10  | 7.2806944-001  | 6.4003593+000 | 6.7519984+001 | 1.0269343+003 |
| 11 2, 9  | 8.6161056+000  | 7.0470148+000 | 1.1202759+002 | 2.1855090+003 |
| 11 3, 9  | 9.4184368+000  | 1.0084309+001 | 1.4829838+002 | 2.9190995+003 |
| 11 3, 8  | 1.3949595+001  | 6.9661532+000 | 1.1714653+002 | 2.6655422+003 |
| 11 4, 8  | 1.7502077+001  | 1.5374120+001 | 2.9649769+002 | 6.9177344+003 |
| 11 4, 7  | 1.8900148+001  | 1.2484685+001 | 2.3800435+002 | 5.7015438+003 |
| 11 5, 7  | 2.6357776+001  | 2.3804504+001 | 6.3056517+002 | 1.8316839+004 |
| 11 5, 6  | 2.6534979+001  | 2.3159443+001 | 6.1083694+002 | 1.7747860+004 |
| 11 6, 6  | 3.7013116+001  | 3.4987832+001 | 1.2799310+003 | 4.8672875+004 |
| 11 6, 5  | 3.7024114+001  | 3.4934492+001 | 1.2775822+003 | 4.8579657+004 |
| 11 7, 5  | 4.9744463+001  | 4.8248527+001 | 2.3705331+003 | 1.1829483+005 |
| 11 7, 4  | 4.9744861+001  | 4.8246165+001 | 2.3703903+003 | 1.1828721+005 |
| 11 8, 4  | 6.4540002+001  | 6.3455810+001 | 4.0557667+003 | 2.6075918+005 |
| 11 8, 3  | 6.4540010+001  | 6.3455749+001 | 4.0557618+003 | 2.6075884+005 |
| 11 9, 3  | 8.1369759+001  | 8.0627742+001 | 6.5179245+003 | 5.2794581+005 |
| 11 9, 2  | 8.1369759+001  | 8.0627741+001 | 6.5179244+003 | 5.2794580+005 |
| 11 10, 2 | 1.0021674+002  | 9.9781879+001 | 9.9642847+003 | 9.9554068+005 |
| 11 10, 1 | 1.0021674+002  | 9.9781879+001 | 9.9642847+003 | 9.9554068+005 |
| 11 11, 1 | 1.2107152+002  | 1.2092803+002 | 1.4626474+004 | 1.7693326+006 |
| 11 11, 0 | 1.2107152+002  | 1.2092803+002 | 1.4626474+004 | 1.7693326+006 |



TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.600000—CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 12 0,12  | -1.1465330+001 | 2.5246382+000 | 1.9599787+001 | 2.5541623+002 |
| 12 1,12  | -1.1464531+001 | 2.5297219+000 | 1.9519810+001 | 2.5754827+002 |
| 12 1,11  | -4.8325653-001 | 6.8471652+000 | 8.2870700+001 | 1.4004794+003 |
| 12 2,11  | -4.5099698-001 | 7.0260052+000 | 8.2708611+001 | 1.4337573+003 |
| 12 2,10  | 8.6645368+000  | 8.6837178+000 | 1.5398936+002 | 3.3179261+003 |
| 12 3,10  | 9.1404993+000  | 1.0789273+001 | 1.7836896+002 | 3.9187131+003 |
| 12 3, 9  | 1.5094060+001  | 7.8473904+000 | 1.5801475+002 | 4.0869725+003 |
| 12 4, 9  | 1.7798312+001  | 1.5618057+001 | 3.2676493+002 | 8.5135561+003 |
| 12 4, 8  | 2.0116291+001  | 1.1587499+001 | 2.4261240+002 | 6.6475263+003 |
| 12 5, 8  | 2.6800897+001  | 2.3554298+001 | 6.4705702+002 | 2.0169623+004 |
| 12 5, 7  | 2.7197914+001  | 2.2187462+001 | 6.0458865+002 | 1.8886930+004 |
| 12 6, 7  | 3.7390981+001  | 3.4627853+001 | 1.2851530+003 | 5.0629001+004 |
| 12 6, 6  | 3.7422756+001  | 3.4476361+001 | 1.2784490+003 | 5.0357124+004 |
| 12 7, 6  | 5.0043435+001  | 4.7945480+001 | 2.3691390+003 | 1.2020356+005 |
| 12 7, 5  | 5.0044915+001  | 4.7936762+001 | 2.3686113+003 | 1.2017512+005 |
| 12 8, 5  | 6.4784839+001  | 6.3208082+001 | 4.0479112+003 | 2.6218814+005 |
| 12 8, 4  | 6.4784882+001  | 6.3207781+001 | 4.0478873+003 | 2.6218646+005 |
| 12 9, 4  | 8.1578033+001  | 8.0417720+001 | 6.5026182+003 | 5.2821034+005 |
| 12 9, 3  | 8.1578033+001  | 8.0417714+001 | 6.5026175+003 | 5.2821028+005 |
| 12 10, 3 | 1.0039918+002  | 9.9598172+001 | 9.9405216+003 | 9.9371954+005 |
| 12 10, 2 | 1.0039918+002  | 9.9598172+001 | 9.9405216+003 | 9.9371953+005 |
| 12 11, 2 | 1.2123500+002  | 1.2076351+002 | 1.4593297+004 | 1.7642462+006 |
| 12 11, 1 | 1.2123500+002  | 1.2076351+002 | 1.4593297+004 | 1.7642462+006 |
| 12 12, 1 | 1.4407768+002  | 1.4392183+002 | 2.0716941+004 | 2.9824600+006 |
| 12 12, 0 | 1.4407768+002  | 1.4392183+002 | 2.0716941+004 | 2.9824600+006 |
| 13 0,13  | -1.3856241+001 | 2.7512559+000 | 2.3170127+001 | 3.2857628+002 |
| 13 1,13  | -1.3855896+001 | 2.7536278+000 | 2.3124503+001 | 3.3000913+002 |
| 13 1,12  | -1.8624677+000 | 7.5832350+000 | 9.9825469+001 | 1.8494527+003 |
| 13 2,12  | -1.8469562+000 | 7.6773849+000 | 9.9538780+001 | 1.8744818+003 |
| 13 2,11  | 8.4249068+000  | 1.0289480+001 | 1.9987765+002 | 4.7315005+003 |
| 13 3,11  | 8.6918859+000  | 1.1634629+001 | 2.1450903+002 | 5.1863345+003 |
| 13 3,10  | 1.6116575+001  | 9.3629336+000 | 2.1982374+002 | 6.3235577+003 |
| 13 4,10  | 1.8042408+001  | 1.6075959+001 | 3.6851109+002 | 1.0674293+004 |
| 13 4, 9  | 2.1544545+001  | 1.1095829+001 | 2.6213435+002 | 8.2065758+003 |
| 13 5, 9  | 2.7300722+001  | 2.3389498+001 | 6.7399059+002 | 2.2774205+004 |
| 13 5, 8  | 2.8100025+001  | 2.0859601+001 | 5.9367592+002 | 2.0210618+004 |
| 13 6, 8  | 3.7851242+001  | 3.4217622+001 | 1.2960598+003 | 5.3426281+004 |
| 13 6, 7  | 3.7933304+001  | 3.3835637+001 | 1.2790261+003 | 5.2715348+004 |
| 13 7, 7  | 5.0410313+001  | 4.7574310+001 | 2.3714299+003 | 1.2313302+005 |
| 13 7, 6  | 5.0415110+001  | 4.7546330+001 | 2.3697324+003 | 1.2304026+005 |
| 13 8, 6  | 6.5082719+001  | 6.2905588+001 | 4.0432104+003 | 2.6488024+005 |
| 13 8, 5  | 6.5082898+001  | 6.2904352+001 | 4.0431119+003 | 2.6487330+005 |
| 13 9, 5  | 8.1829098+001  | 8.0164031+001 | 6.4899785+003 | 5.2997051+005 |
| 13 9, 4  | 8.1829102+001  | 8.0163996+001 | 6.4899750+003 | 5.2997020+005 |
| 13 10, 4 | 1.0061727+002  | 9.9378372+001 | 9.9187995+003 | 9.9358572+005 |
| 13 10, 3 | 1.0061727+002  | 9.9378371+001 | 9.9187994+003 | 9.9358571+005 |
| 13 11, 3 | 1.2142891+002  | 1.2056828+002 | 1.4561420+004 | 1.7609764+006 |
| 13 11, 2 | 1.2142891+002  | 1.2056828+002 | 1.4561420+004 | 1.7609764+006 |
| 13 12, 2 | 1.4425332+002  | 1.4374508+002 | 2.0673880+004 | 2.9745030+006 |
| 13 12, 1 | 1.4425332+002  | 1.4374508+002 | 2.0673880+004 | 2.9745030+006 |
| 13 13, 1 | 1.6908385+002  | 1.6891562+002 | 2.8536548+004 | 4.8214445+006 |
| 13 13, 0 | 1.6908385+002  | 1.6891562+002 | 2.8536548+004 | 4.8214445+006 |
| 14 0,14  | -1.6469641+001 | 2.9768742+000 | 2.7047329+001 | 4.1425230+002 |
| 14 1,14  | -1.6469493+001 | 2.9779643+000 | 2.7022175+001 | 4.1517199+002 |
| 14 1,13  | -3.4702397+000 | 8.2951209+000 | 1.1819053+002 | 2.3807309+003 |
| 14 2,13  | -3.4629298+000 | 8.3432948+000 | 1.1792446+002 | 2.3988346+003 |
| 14 2,12  | 7.9091209+000  | 1.1784358+001 | 2.4837838+002 | 6.4225324+003 |
| 14 3,12  | 8.0524957+000  | 1.2590752+001 | 2.5629847+002 | 6.7480900+003 |
| 14 3,11  | 1.6919079+001  | 1.1436924+001 | 3.0317309+002 | 9.5725888+003 |
| 14 4,11  | 1.8197764+001  | 1.6768058+001 | 4.2294049+002 | 1.3507150+004 |
| 14 4,10  | 2.3102542+001  | 1.1218864+001 | 3.0475873+002 | 1.0780665+004 |
| 14 5,10  | 2.7836897+001  | 2.3377953+001 | 7.1476455+002 | 2.6332797+004 |
| 14 5, 9  | 2.9290484+001  | 1.9294735+001 | 5.8160683+002 | 2.1815263+004 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.600000—CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 14 6, 9  | 3.8398459+001  | 3.3784500+001 | 1.3151786+003 | 5.7269648+004 |
| 14 6, 8  | 3.8590631+001  | 3.2920162+001 | 1.2762107+003 | 5.5583204+004 |
| 14 7, 8  | 5.0855164+001  | 4.7128761+001 | 2.3784538+003 | 1.2727872+005 |
| 14 7, 7  | 5.0869054+001  | 4.7048808+001 | 2.3735845+003 | 1.2700762+005 |
| 14 8, 7  | 6.5441829+001  | 6.2539359+001 | 4.0424595+003 | 2.6908408+005 |
| 14 8, 6  | 6.5442470+001  | 6.2534958+001 | 4.0421083+003 | 2.6905911+005 |
| 14 9, 6  | 8.2129248+001  | 7.9859827+001 | 6.4808629+003 | 5.3355580+005 |
| 14 9, 5  | 8.2129268+001  | 7.9859670+001 | 6.4808470+003 | 5.3355437+005 |
| 14 10, 5 | 1.0087598+002  | 9.9117219+001 | 9.9000310+003 | 9.9555933+005 |
| 14 10, 4 | 1.0087598+002  | 9.9117216+001 | 9.9000306+003 | 9.9555928+005 |
| 14 11, 4 | 1.2165734+002  | 1.2033814+002 | 1.4531787+004 | 1.7600417+006 |
| 14 11, 3 | 1.2165734+002  | 1.2033814+002 | 1.4531787+004 | 1.7600417+006 |
| 14 12, 3 | 1.4445887+002  | 1.4353815+002 | 2.0632246+004 | 2.9690315+006 |
| 14 12, 2 | 1.4445887+002  | 1.4353815+002 | 2.0632246+004 | 2.9690315+006 |
| 14 13, 2 | 1.6927169+002  | 1.6872660+002 | 2.8481811+004 | 4.8094427+006 |
| 14 13, 1 | 1.6927169+002  | 1.6872660+002 | 2.8481811+004 | 4.8094427+006 |
| 14 14, 1 | 1.9609002+002  | 1.9590941+002 | 3.8385220+004 | 7.5216295+006 |
| 14 14, 0 | 1.9609002+002  | 1.9590941+002 | 3.8385220+004 | 7.5216295+006 |
| 15 0,15  | -1.9305427+001 | 3.2019334+000 | 3.1228863+001 | 5.1346293+002 |
| 15 1,15  | -1.9305364+001 | 3.2024281+000 | 3.1215386+001 | 5.1403068+002 |
| 15 1,14  | -5.3038808+000 | 8.9925792+000 | 1.3802133+002 | 3.0013064+003 |
| 15 2,14  | -5.3004933+000 | 9.0166555+000 | 1.3782056+002 | 3.0139068+003 |
| 15 2,13  | 7.1338898+000  | 1.3165478+001 | 2.9935581+002 | 8.4032167+003 |
| 15 3,13  | 7.2083187+000  | 1.3626033+001 | 3.0323009+002 | 8.6275203+003 |
| 15 3,12  | 1.7434700+001  | 1.3823793+001 | 4.0339208+002 | 1.3872698+004 |
| 15 4,12  | 1.8229246+001  | 1.7692421+001 | 4.9055852+002 | 1.7113098+004 |
| 15 4,11  | 2.4686856+001  | 1.2115275+001 | 3.7943855+002 | 1.4931289+004 |
| 15 5,11  | 2.8380639+001  | 2.3585857+001 | 7.7283206+002 | 3.1080707+004 |
| 15 5,10  | 3.0782842+001  | 1.7805154+001 | 5.7858105+002 | 2.4075404+004 |
| 15 6,10  | 3.9031264+001  | 3.3376804+001 | 1.3460471+003 | 6.2423345+004 |
| 15 6, 9  | 3.9442650+001  | 3.1617162+001 | 1.2655204+003 | 5.8782939+004 |
| 15 7, 9  | 5.1387805+001  | 4.6608772+001 | 2.3916812+003 | 1.3286337+005 |
| 15 7, 8  | 5.1424327+001  | 4.6402180+001 | 2.3790268+003 | 1.3214184+005 |
| 15 8, 8  | 6.5871117+001  | 6.2099890+001 | 4.0464888+003 | 2.7505745+005 |
| 15 8, 7  | 6.5873164+001  | 6.2085941+001 | 4.0453736+003 | 2.7497715+005 |
| 15 9, 7  | 8.2485382+001  | 7.9497390+001 | 6.4761385+003 | 5.3930877+005 |
| 15 9, 6  | 8.2485459+001  | 7.9496775+001 | 6.4760761+003 | 5.3930315+005 |
| 15 10, 6 | 1.0118077+002  | 9.8808859+001 | 9.8851625+003 | 1.0000821+006 |
| 15 10, 5 | 1.0118077+002  | 9.8808840+001 | 9.8851601+003 | 1.0000819+006 |
| 15 11, 5 | 1.2192469+002  | 1.2006846+002 | 1.4505394+004 | 1.7619914+006 |
| 15 11, 4 | 1.2192469+002  | 1.2006846+002 | 1.4505393+004 | 1.7619914+006 |
| 15 12, 4 | 1.4469801+002  | 1.4329728+002 | 2.0593059+004 | 2.9667104+006 |
| 15 12, 3 | 1.4469801+002  | 1.4329728+002 | 2.0593059+004 | 2.9667104+006 |
| 15 13, 3 | 1.6948900+002  | 1.6850786+002 | 2.8428626+004 | 4.8007635+006 |
| 15 13, 2 | 1.6948900+002  | 1.6850786+002 | 2.8428626+004 | 4.8007635+006 |
| 15 14, 2 | 1.9629008+002  | 1.9570809+002 | 3.8316864+004 | 7.5040796+006 |
| 15 14, 1 | 1.9629008+002  | 1.9570809+002 | 3.8316864+004 | 7.5040796+006 |
| 15 15, 1 | 2.2509620+002  | 2.2490320+002 | 5.0586884+004 | 1.1379291+007 |
| 15 15, 0 | 2.2509620+002  | 2.2490320+002 | 5.0586884+004 | 1.1379291+007 |

KAPPA = - 0.700000

|        |                |               |               |               |
|--------|----------------|---------------|---------------|---------------|
| 2 0, 2 | -1.9626129-002 | 1.9435408-002 | 7.7741632-002 | 3.1096653-001 |
| 2 1, 2 | 7.5675676-001  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 1, 1 | 1.2432432+000  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 2, 1 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 2 2, 0 | 4.0196261+000  | 3.9805646+000 | 1.5922258+001 | 6.3689033+001 |
| 3 0, 3 | -9.6293992-002 | 9.1870694-002 | 3.6748278-001 | 1.4699311+000 |
| 3 1, 3 | 5.0190948-001  | 1.0109090+000 | 1.1090900+000 | 1.9927191+000 |
| 3 1, 2 | 1.4733847+000  | 1.0139016+000 | 1.1390162+000 | 2.2650478+000 |
| 3 2, 2 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 3 2, 1 | 4.0962940+000  | 3.9081293+000 | 1.5632517+001 | 6.2530069+001 |
| 3 3, 1 | 9.0116040+000  | 8.9890910+000 | 8.0890910+001 | 7.2800728+002 |
| 3 3, 0 | 9.0131018+000  | 8.9860984+000 | 8.0860984+001 | 7.2773495+002 |

TABLE II.--EXPECTATION VALUES--CONTINUED

KAPPA = -0.70000--CONTINUED

|        |                |               |               |               |
|--------|----------------|---------------|---------------|---------------|
| 4 0, 4 | -2.7738498-001 | 2.4487414-001 | 9.8763996-001 | 4.0808545+000 |
| 4 1, 4 | 1.4243021-001  | 1.0420101+000 | 1.4201011+000 | 4.8229201+000 |
| 4 1, 3 | 1.7536550+000  | 1.0626065+000 | 1.6260651+000 | 6.6971925+000 |
| 4 2, 3 | 3.9846799+000  | 4.0152811+000 | 1.6305622+001 | 6.9134445+001 |
| 4 2, 2 | 4.2619702+000  | 3.7706912+000 | 1.5323287+001 | 6.5141493+001 |
| 4 3, 2 | 9.0467590+000  | 8.9579899+000 | 8.0579899+001 | 7.2517708+002 |
| 4 3, 1 | 9.0571558+000  | 8.9373935+000 | 8.0373935+001 | 7.2330281+002 |
| 4 4, 1 | 1.6015320+001  | 1.5984719+001 | 2.5569438+002 | 4.0908656+003 |
| 4 4, 0 | 1.6015415+001  | 1.5984435+001 | 2.5568907+002 | 4.0907777+003 |
| 5 0, 5 | -6.0519027-001 | 4.7313006-001 | 1.9504026+000 | 8.7277290+000 |
| 5 1, 5 | -3.3468187-001 | 1.1005172+000 | 2.0073928+000 | 1.0224792+001 |
| 5 1, 4 | 2.0568490+000  | 1.1801324+000 | 2.8061756+000 | 1.7561844+001 |
| 5 2, 4 | 3.9411216+000  | 4.0583062+000 | 1.7166124+001 | 8.3590891+001 |
| 5 2, 3 | 4.5454645+000  | 3.5877110+000 | 1.5262994+001 | 7.5646379+001 |
| 5 3, 3 | 9.0999467+000  | 8.9180578+000 | 8.0623770+001 | 7.3705499+002 |
| 5 3, 2 | 9.1408428+000  | 8.8384642+000 | 7.9825637+001 | 7.2973507+002 |
| 5 4, 2 | 1.6058878+001  | 1.5941694+001 | 2.5483388+002 | 4.0764091+003 |
| 5 4, 1 | 1.6059726+001  | 1.5939159+001 | 2.5478660+002 | 4.0756259+003 |
| 5 5, 1 | 2.5018519+001  | 2.4981425+001 | 6.2436884+002 | 1.5607720+004 |
| 5 5, 0 | 2.5018524+001  | 2.4981403+001 | 6.2436819+002 | 1.5607703+004 |
| 6 0, 6 | -1.1043456+000 | 7.4036962-001 | 3.1726614+000 | 1.6077545+001 |
| 6 1, 6 | -9.4176362-001 | 1.1895315+000 | 2.9099086+000 | 1.8758133+001 |
| 6 1, 5 | 2.3445253+000  | 1.4139200+000 | 5.1809246+000 | 4.0127074+001 |
| 6 2, 5 | 3.8537009+000  | 4.1431332+000 | 1.8865865+001 | 1.1227203+002 |
| 6 2, 4 | 4.9538502+000  | 3.4152352+000 | 1.5925929+001 | 1.0006554+002 |
| 6 3, 4 | 9.1711635+000  | 8.8785408+000 | 8.1401655+001 | 7.7451585+002 |
| 6 3, 3 | 9.2902207+000  | 8.6543891+000 | 7.9137734+001 | 7.5333391+002 |
| 6 4, 3 | 1.6124568+001  | 1.5878671+001 | 2.5426725+002 | 4.0940874+003 |
| 6 4, 2 | 1.6128764+001  | 1.5866201+001 | 2.5403458+002 | 4.0902188+003 |
| 6 5, 2 | 2.5067897+001  | 2.4931928+001 | 6.2268844+002 | 1.5561726+004 |
| 6 5, 1 | 2.5067957+001  | 2.4931691+001 | 6.2268134+002 | 1.5561539+004 |
| 6 6, 1 | 3.6021731+001  | 3.5978196+001 | 1.2948669+003 | 4.6609641+004 |
| 6 6, 0 | 3.6021732+001  | 3.5978194+001 | 1.2948668+003 | 4.6609638+004 |
| 7 0, 7 | -1.7819675+000 | 1.0102395+000 | 4.5769281+000 | 2.6952099+001 |
| 7 1, 7 | -1.6892367+000 | 1.3077084+000 | 4.1305881+000 | 3.0875610+001 |
| 7 1, 6 | 2.5677020+000  | 1.8128191+000 | 9.3274523+000 | 8.1947310+001 |
| 7 2, 6 | 3.7047764+000  | 4.2835484+000 | 2.1693185+001 | 1.6051644+002 |
| 7 2, 5 | 5.4715923+000  | 3.3178568+000 | 1.7949744+001 | 1.4756962+002 |
| 7 3, 5 | 9.2560521+000  | 8.8554472+000 | 8.3408042+001 | 8.5089547+002 |
| 7 3, 4 | 9.5393010+000  | 8.3517425+000 | 7.8253301+001 | 8.0093614+002 |
| 7 4, 4 | 1.6218169+001  | 1.5793779+001 | 2.5432263+002 | 4.1637450+003 |
| 7 4, 3 | 1.6233317+001  | 1.5749250+001 | 2.5348997+002 | 4.1497715+003 |
| 7 5, 3 | 2.5137946+001  | 2.4861897+001 | 6.2131418+002 | 1.5579638+004 |
| 7 5, 2 | 2.5138298+001  | 2.4860491+001 | 6.2127206+002 | 1.5578526+004 |
| 7 6, 2 | 3.6077055+001  | 3.5922673+001 | 1.2919842+003 | 4.6491739+004 |
| 7 6, 1 | 3.6077059+001  | 3.5922654+001 | 1.2919834+003 | 4.6491707+004 |
| 7 7, 1 | 4.9024969+001  | 4.8974947+001 | 2.3991472+003 | 1.1754259+005 |
| 7 7, 0 | 4.9024969+001  | 4.8974947+001 | 2.3991472+003 | 1.1754259+005 |
| 8 0, 8 | -2.6359494+000 | 1.2648005+000 | 6.1424883+000 | 4.2211298+001 |
| 8 1, 8 | -2.5850484+000 | 1.4504945+000 | 5.6487381+000 | 4.7041130+001 |
| 8 1, 7 | 2.6734176+000  | 2.3968164+000 | 1.5643039+001 | 1.5180868+002 |
| 8 2, 7 | 3.4757157+000  | 4.4906057+000 | 2.5900258+001 | 2.3378203+002 |
| 8 2, 6 | 6.0672678+000  | 3.3541135+000 | 2.2171971+001 | 2.3289790+002 |
| 8 3, 6 | 9.3454280+000  | 8.8699314+000 | 8.7231754+001 | 9.8198175+002 |
| 8 3, 5 | 9.9232862+000  | 7.9296081+000 | 7.7417295+001 | 8.8198792+002 |
| 8 4, 5 | 1.6344459+001  | 1.5689899+001 | 2.5546857+002 | 4.3096067+003 |
| 8 4, 4 | 1.6388830+001  | 1.5561721+001 | 2.5306010+002 | 4.2685001+003 |
| 8 5, 4 | 2.5234265+001  | 2.4766314+001 | 6.2053081+002 | 1.5694091+004 |
| 8 5, 3 | 2.5235778+001  | 2.4760317+001 | 6.2035105+002 | 1.5689321+004 |
| 8 6, 3 | 3.6151603+001  | 3.5847812+001 | 1.2894613+003 | 4.6490358+004 |
| 8 6, 2 | 3.6151629+001  | 3.5847681+001 | 1.2894556+003 | 4.6490137+004 |
| 8 7, 2 | 4.9086437+001  | 4.8913260+001 | 2.3945887+003 | 1.1728089+005 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.700000—CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 8 7, 1   | 4.9086437+001  | 4.8913259+001 | 2.3945886+003 | 1.1728088+005 |
| 8 8, 1   | 6.4028222+001  | 6.3971684+001 | 4.0931699+003 | 2.6192625+005 |
| 8 8, 0   | 6.4028222+001  | 6.3971684+001 | 4.0931699+003 | 2.6192625+005 |
| 9 0, 9   | -3.6618973+000 | 1.5011145+000 | 7.8860313+000 | 6.2621042+001 |
| 9 1, 9   | -3.6347405+000 | 1.6120044+000 | 7.4358687+000 | 6.7810571+001 |
| 9 1, 8   | 2.6170928+000  | 3.1292977+000 | 2.4064350+001 | 2.5722750+002 |
| 9 2, 8   | 3.1481628+000  | 4.7702275+000 | 3.1664406+001 | 3.3737201+002 |
| 9 2, 7   | 6.6985812+000  | 3.5827125+000 | 2.9736486+001 | 3.7974978+002 |
| 9 3, 7   | 9.4255540+000  | 8.9455829+000 | 9.3520120+001 | 1.1859755+003 |
| 9 3, 6   | 1.0465798+001  | 7.4488164+000 | 7.7508322+001 | 1.0130834+003 |
| 9 4, 6   | 1.6505938+001  | 1.5577072+001 | 2.5835463+002 | 4.5610465+003 |
| 9 4, 5   | 1.6617287+001  | 1.5264117+001 | 2.5242486+002 | 4.4571420+003 |
| 9 5, 5   | 2.5362942+001  | 2.4640751+001 | 6.2069611+002 | 1.5942625+004 |
| 9 5, 4   | 2.5368161+001  | 2.4620235+001 | 6.2008007+002 | 1.5926134+004 |
| 9 6, 4   | 3.6249940+001  | 3.5748991+001 | 1.2876001+003 | 4.6657480+004 |
| 9 6, 3   | 3.6250070+001  | 3.5748346+001 | 1.2875717+003 | 4.6656386+004 |
| 9 7, 3   | 4.9166110+001  | 4.8833252+001 | 2.3904526+003 | 1.1721577+005 |
| 9 7, 2   | 4.9166112+001  | 4.8833241+001 | 2.3904519+003 | 1.1721573+005 |
| 9 8, 2   | 6.4095959+001  | 6.3903710+001 | 4.0863809+003 | 2.6140410+005 |
| 9 8, 1   | 6.4095959+001  | 6.3903710+001 | 4.0863809+003 | 2.6140410+005 |
| 9 9, 1   | 8.1031485+001  | 8.0968410+001 | 6.5568953+003 | 5.3103282+005 |
| 9 9, 0   | 8.1031485+001  | 8.0968410+001 | 6.5568953+003 | 5.3103282+005 |
| 10 0,10  | -4.8560692+000 | 1.7225794+000 | 9.8319731+000 | 8.8828818+001 |
| 10 1,10  | -4.8418919+000 | 1.7865865+000 | 9.4670914+000 | 9.3842441+001 |
| 10 1, 9  | 2.3729477+000  | 3.9315254+000 | 3.4119961+001 | 4.0278364+002 |
| 10 2, 9  | 2.7053150+000  | 5.1218252+000 | 3.9065563+001 | 4.7628712+002 |
| 10 2, 8  | 7.3140525+000  | 4.0665729+000 | 4.2103574+001 | 6.2373819+002 |
| 10 3, 8  | 9.4789814+000  | 9.1053705+000 | 1.0293062+002 | 1.4833183+003 |
| 10 3, 7  | 1.1167721+001  | 7.0200902+000 | 8.0076978+001 | 1.2233117+003 |
| 10 4, 7  | 1.6701545+001  | 1.5473793+001 | 2.6383422+002 | 4.9534390+003 |
| 10 4, 6  | 1.6948364+001  | 1.4809008+001 | 2.5107599+002 | 4.7214967+003 |
| 10 5, 6  | 2.5530139+001  | 2.4482903+001 | 6.2228161+002 | 1.6368544+004 |
| 10 5, 5  | 2.5545469+001  | 2.4423304+001 | 6.2048599+002 | 1.6319801+004 |
| 10 6, 5  | 3.6377212+001  | 3.5621093+001 | 1.2867385+003 | 4.7050738+004 |
| 10 6, 4  | 3.6377725+001  | 3.5618552+001 | 1.2866268+003 | 4.7046405+004 |
| 10 7, 4  | 4.9267741+001  | 4.8731071+001 | 2.3870790+003 | 1.1742612+005 |
| 10 7, 3  | 4.9267751+001  | 4.8731012+001 | 2.3870754+003 | 1.1742592+005 |
| 10 8, 3  | 6.4181174+001  | 6.3818159+001 | 4.0800778+003 | 2.6119372+005 |
| 10 8, 2  | 6.4181174+001  | 6.3818158+001 | 4.0800778+003 | 2.6119372+005 |
| 10 9, 2  | 8.1105571+001  | 8.0894069+001 | 6.5472417+003 | 5.3007318+005 |
| 10 9, 1  | 8.1105571+001  | 8.0894069+001 | 6.5472417+003 | 5.3007318+005 |
| 10 10, 1 | 1.0003475+002  | 9.9965130+001 | 9.9942839+003 | 9.9928582+005 |
| 10 10, 0 | 1.0003475+002  | 9.9965130+001 | 9.9942839+003 | 9.9928582+005 |
| 11 0,11  | -6.2159445+000 | 1.9336973+000 | 1.1998445+001 | 1.2140945+002 |
| 11 1,11  | -6.2086689+000 | 1.9696654+000 | 1.1725775+001 | 1.2586123+002 |
| 11 1,10  | 1.9341760+000  | 4.7308102+000 | 4.5308079+001 | 5.9110331+002 |
| 11 2,10  | 2.1329203+000  | 5.5386250+000 | 4.8089884+001 | 6.5523467+002 |
| 11 2, 9  | 7.8552662+000  | 4.8558275+000 | 6.0739210+001 | 1.0110131+003 |
| 11 3, 9  | 9.4857543+000  | 9.3686223+000 | 1.1607038+002 | 1.8962323+003 |
| 11 3, 8  | 1.2005839+001  | 6.7597398+000 | 8.7108626+001 | 1.5593645+003 |
| 11 4, 8  | 1.6925704+001  | 1.5406419+001 | 2.7295510+002 | 5.5289739+003 |
| 11 4, 7  | 1.7417583+001  | 1.4163986+001 | 2.4868017+002 | 5.0663826+003 |
| 11 5, 7  | 2.5741417+001  | 2.4294804+001 | 6.2593389+002 | 1.7022498+004 |
| 11 5, 6  | 2.5781146+001  | 2.4142807+001 | 6.2132942+002 | 1.6894979+004 |
| 11 6, 6  | 3.6539101+001  | 3.5458803+001 | 1.2872603+003 | 4.7733426+004 |
| 11 6, 5  | 3.6540819+001  | 3.5450341+001 | 1.2868878+003 | 4.7718856+004 |
| 11 7, 5  | 4.9395528+001  | 4.8602356+001 | 2.3848366+003 | 1.1799815+005 |
| 11 7, 4  | 4.9395573+001  | 4.8602090+001 | 2.3848205+003 | 1.1799729+005 |
| 11 8, 4  | 6.4287034+001  | 6.3711784+001 | 4.0746425+003 | 2.6140918+005 |
| 11 8, 3  | 6.4287034+001  | 6.3711779+001 | 4.0746421+003 | 2.6140916+005 |
| 11 9, 3  | 8.1196589+001  | 8.0802707+001 | 6.5381374+003 | 5.2958438+005 |
| 11 9, 2  | 8.1196589+001  | 8.0802707+001 | 6.5381374+003 | 5.2958438+005 |

TABLE II.--EXPECTATION VALUES--CONTINUED

KAPPA = -0.700000--CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 11 10, 2 | 1.0011524+002  | 9.9884368+001 | 9.9810522+003 | 9.9763318+005 |
| 11 10, 1 | 1.0011524+002  | 9.9884368+001 | 9.9810522+003 | 9.9763318+005 |
| 11 11, 1 | 1.2103803+002  | 1.2096184+002 | 1.4633296+004 | 1.7703789+006 |
| 11 11, 0 | 1.2103803+002  | 1.2096184+002 | 1.4633296+004 | 1.7703789+006 |
| 12 0,12  | -7.7399954+000 | 2.1381647+000 | 1.4395121+001 | 1.6091899+002 |
| 12 1,12  | -7.7363132+000 | 2.1579417+000 | 1.4203297+001 | 1.6461117+002 |
| 12 1,11  | 1.3051071+000  | 5.4896340+000 | 5.7363039+001 | 8.2476506+002 |
| 12 2,11  | 1.4197792+000  | 6.0095891+000 | 5.8657056+001 | 8.7874499+002 |
| 12 2,10  | 8.2638562+000  | 5.9492583+000 | 8.6401690+001 | 1.5876330+003 |
| 12 3,10  | 9.4248164+000  | 9.7482649+000 | 1.3342848+002 | 2.4478853+003 |
| 12 3, 9  | 1.2939038+001  | 6.7647351+000 | 1.0093108+002 | 2.0925697+003 |
| 12 4, 9  | 1.7167921+001  | 1.5406614+001 | 2.8691317+002 | 6.3372703+003 |
| 12 4, 8  | 1.8058778+001  | 1.3353507+001 | 2.4586514+002 | 5.5107331+003 |
| 12 5, 8  | 2.6000799+001  | 2.4085424+001 | 6.3254888+002 | 1.7964888+004 |
| 12 5, 7  | 2.6093638+001  | 2.3738256+001 | 6.2194677+002 | 1.7663270+004 |
| 12 6, 7  | 3.6741706+001  | 3.5257281+001 | 1.2896188+003 | 4.8775058+004 |
| 12 6, 6  | 3.6746764+001  | 3.5232583+001 | 1.2885290+003 | 4.8731925+004 |
| 12 7, 6  | 4.9554141+001  | 4.8442218+001 | 2.3841197+003 | 1.1902486+005 |
| 12 7, 5  | 4.9554308+001  | 4.8441224+001 | 2.3840595+003 | 1.1902164+005 |
| 12 8, 5  | 6.4417049+001  | 6.3580943+001 | 4.0704859+003 | 2.6217422+005 |
| 12 8, 4  | 6.4417053+001  | 6.3580919+001 | 4.0704839+003 | 2.6217408+005 |
| 12 9, 4  | 8.1307279+001  | 8.0691526+001 | 6.5300060+003 | 5.2972490+005 |
| 12 9, 3  | 8.1307279+001  | 8.0691525+001 | 6.5300060+003 | 5.2972490+005 |
| 12 10, 3 | 1.0021224+002  | 9.9787016+001 | 9.9684333+003 | 9.9666410+005 |
| 12 10, 2 | 1.0021224+002  | 9.9787016+001 | 9.9684333+003 | 9.9666410+005 |
| 12 11, 2 | 1.2112495+002  | 1.2087463+002 | 1.4615694+004 | 1.7676789+006 |
| 12 11, 1 | 1.2112495+002  | 1.2087463+002 | 1.4615694+004 | 1.7676789+006 |
| 12 12, 1 | 1.4404131+002  | 1.4395856+002 | 2.0725892+004 | 2.9841146+006 |
| 12 12, 0 | 1.4404131+002  | 1.4395856+002 | 2.0725892+004 | 2.9841146+006 |
| 13 0,13  | -9.4273452+000 | 2.3385497+000 | 1.7025454+001 | 2.0792898+002 |
| 13 1,13  | -9.4255029+000 | 2.3492297+000 | 1.6896704+001 | 2.1082387+002 |
| 13 1,12  | 4.9337985-001  | 6.2008835+000 | 7.0243574+001 | 1.1071188+003 |
| 13 2,12  | 5.5771783-001  | 6.5220506+000 | 7.0657594+001 | 1.1513030+003 |
| 13 2,11  | 8.4930485+000  | 7.2675798+000 | 1.1850773+002 | 2.3827985+003 |
| 13 3,11  | 9.2754758+000  | 1.0248766+001 | 1.5531561+002 | 3.1612802+003 |
| 13 3,10  | 1.3914385+001  | 7.1183194+000 | 1.2433992+002 | 2.9283526+003 |
| 13 4,10  | 1.7413052+001  | 1.5507525+001 | 3.0697472+002 | 7.4355325+003 |
| 13 4, 9  | 1.8891661+001  | 1.2488223+001 | 2.4497198+002 | 6.1118859+003 |
| 13 5, 9  | 2.6309647+001  | 2.3872853+001 | 6.4333936+002 | 1.9268933+004 |
| 13 5, 8  | 2.6508062+001  | 2.3154896+001 | 6.2116544+002 | 1.8616189+004 |
| 13 6, 8  | 3.6991291+001  | 3.5013402+001 | 1.2943858+003 | 5.0252931+004 |
| 13 6, 7  | 3.7004681+001  | 3.4948727+001 | 1.2915211+003 | 5.0137723+004 |
| 13 7, 7  | 4.9748718+001  | 4.8245307+001 | 2.3853476+003 | 1.2060552+005 |
| 13 7, 6  | 4.9749267+001  | 4.8242058+001 | 2.3851505+003 | 1.2059492+005 |
| 13 8, 6  | 6.4575087+001  | 6.3421555+001 | 4.0680430+003 | 2.6362144+005 |
| 13 8, 5  | 6.4575102+001  | 6.3421454+001 | 4.0680349+003 | 2.6362087+005 |
| 13 9, 5  | 8.1440647+001  | 8.0557421+001 | 6.5233015+003 | 5.3066563+005 |
| 13 9, 4  | 8.1440648+001  | 8.0557419+001 | 6.5233013+003 | 5.3066561+005 |
| 13 10, 4 | 1.0032816+002  | 9.9670615+001 | 9.9568919+003 | 9.9659173+005 |
| 13 10, 3 | 1.0032816+002  | 9.9670615+001 | 9.9568919+003 | 9.9659173+005 |
| 13 11, 3 | 1.2122805+002  | 1.2077116+002 | 1.4598767+004 | 1.7659394+006 |
| 13 11, 2 | 1.2122805+002  | 1.2077116+002 | 1.4598767+004 | 1.7659394+006 |
| 13 12, 2 | 1.4413470+002  | 1.4386485+002 | 2.0703047+004 | 2.9798911+006 |
| 13 12, 1 | 1.4413470+002  | 1.4386485+002 | 2.0703047+004 | 2.9798911+006 |
| 13 13, 1 | 1.6904459+002  | 1.6895527+002 | 2.8548032+004 | 4.8239634+006 |
| 13 13, 0 | 1.6904459+002  | 1.6895527+002 | 2.8548032+004 | 4.8239634+006 |
| 14 0,14  | -1.1277506+001 | 2.5364918+000 | 1.9889425+001 | 2.6303931+002 |
| 14 1,14  | -1.1276593+001 | 2.5421721+000 | 1.9806220+001 | 2.6520483+002 |
| 14 1,13  | -4.9412976-001 | 6.8719731+000 | 8.4014348+001 | 1.4421613+003 |
| 14 2,13  | -4.5882964-001 | 7.0640263+000 | 8.3984819+001 | 1.4774261+003 |
| 14 2,12  | 8.5167833+000  | 8.6821122+000 | 1.5539682+002 | 3.4017943+003 |
| 14 3,12  | 9.0187463+000  | 1.0865449+001 | 1.8183259+002 | 4.0581589+003 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.700000 —CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 14 3,11  | 1.4870508+001  | 7.8949277+000 | 1.6052032+002 | 4.2109806+003 |
| 14 4,11  | 1.7642133+001  | 1.5739595+001 | 3.3437525+002 | 8.8878662+003 |
| 14 4,10  | 1.9911547+001  | 1.1739740+001 | 2.4997794+002 | 6.9847605+003 |
| 14 5,10  | 2.6665566+001  | 2.3685095+001 | 6.5986791+002 | 2.1023965+004 |
| 14 5, 9  | 2.7056749+001  | 2.2335332+001 | 6.1755086+002 | 1.9725688+004 |
| 14 6, 9  | 3.7293837+001  | 3.4727698+001 | 1.3023304+003 | 5.2255237+004 |
| 14 6, 8  | 3.7326263+001  | 3.4573342+001 | 1.2954557+003 | 5.1973005+004 |
| 14 7, 8  | 4.9984855+001  | 4.8006023+001 | 2.3889729+003 | 1.2284558+005 |
| 14 7, 7  | 4.9986473+001  | 4.7996515+001 | 2.3883951+003 | 1.2281417+005 |
| 14 8, 7  | 6.4765386+001  | 6.3229063+001 | 4.0677670+003 | 2.6589147+005 |
| 14 8, 6  | 6.4765439+001  | 6.3228696+001 | 4.0677377+003 | 2.6588940+005 |
| 14 9, 6  | 8.1599977+001  | 8.0396954+001 | 6.5185040+003 | 5.3258901+005 |
| 14 9, 5  | 8.1599978+001  | 8.0396944+001 | 6.5185030+003 | 5.3258893+005 |
| 14 10, 5 | 1.0046562+002  | 9.9532466+001 | 9.9469244+003 | 9.9764472+005 |
| 14 10, 4 | 1.0046562+002  | 9.9532466+001 | 9.9469243+003 | 9.9764472+005 |
| 14 11, 4 | 1.2134947+002  | 1.2064925+002 | 1.4583023+004 | 1.7654398+006 |
| 14 11, 3 | 1.2134947+002  | 1.2064925+002 | 1.4583023+004 | 1.7654398+006 |
| 14 12, 3 | 1.4424398+002  | 1.4375518+002 | 2.0680942+004 | 2.9769813+006 |
| 14 12, 2 | 1.4424398+002  | 1.4375518+002 | 2.0680942+004 | 2.9769813+006 |
| 14 13, 2 | 1.6914446+002  | 1.6885506+002 | 2.8518993+004 | 4.8175932+006 |
| 14 13, 1 | 1.6914446+002  | 1.6885506+002 | 2.8518993+004 | 4.8175932+006 |
| 14 14, 1 | 1.9604787+002  | 1.9595197+002 | 3.8399676+004 | 7.5253420+006 |
| 14 14, 0 | 1.9604787+002  | 1.9595197+002 | 3.8399676+004 | 7.5253420+006 |
| 15 0,15  | -1.3290208+001 | 2.7329875+000 | 2.2985540+001 | 3.2687698+002 |
| 15 1,15  | -1.3289759+001 | 2.7359695+000 | 2.2933422+001 | 3.2843353+002 |
| 15 1,14  | -1.6524352+000 | 7.5137204+000 | 9.8758910+001 | 1.8342302+003 |
| 15 2,14  | -1.6334175+000 | 7.6256032+000 | 9.8553254+001 | 1.8616768+003 |
| 15 2,13  | 8.3293345+000  | 1.0080099+001 | 1.9537143+002 | 4.6370728+003 |
| 15 3,13  | 8.6383635+000  | 1.1585642+001 | 2.1288290+002 | 5.1582753+003 |
| 15 3,12  | 1.5741293+001  | 9.1382046+000 | 2.1226102+002 | 6.1078046+003 |
| 15 4,12  | 1.7833635+001  | 1.6126671+001 | 3.7020345+002 | 1.0763378+004 |
| 15 4,11  | 2.1088262+001  | 1.1279597+001 | 2.6571641+002 | 8.3089820+003 |
| 15 5,11  | 2.7061579+001  | 2.3558736+001 | 6.8402104+002 | 2.3338234+004 |
| 15 5,10  | 2.7776431+001  | 2.1253809+001 | 6.1036640+002 | 2.0968366+004 |
| 15 6,10  | 3.7654369+001  | 3.4406906+001 | 1.3145283+003 | 5.4886175+004 |
| 15 6, 9  | 3.7727026+001  | 3.4067683+001 | 1.2993065+003 | 5.4245028+004 |
| 15 7, 9  | 5.0268543+001  | 4.7719028+001 | 2.3955059+003 | 1.2585734+005 |
| 15 7, 8  | 5.0272892+001  | 4.7693679+001 | 2.3939607+003 | 1.2577222+005 |
| 15 8, 8  | 6.4992576+001  | 6.2998407+001 | 4.0701235+003 | 2.6913191+005 |
| 15 8, 7  | 6.4992748+001  | 6.2997222+001 | 4.0700287+003 | 2.6912519+005 |
| 15 9, 7  | 8.1788836+001  | 8.0206315+001 | 6.5161140+003 | 5.3568804+005 |
| 15 9, 6  | 8.1788840+001  | 8.0206278+001 | 6.5161102+003 | 5.3568771+005 |
| 15 10, 6 | 1.0062748+002  | 9.9369608+001 | 9.9390552+003 | 1.0000663+006 |
| 15 10, 5 | 1.0062748+002  | 9.9369607+001 | 9.9390551+003 | 1.0000663+006 |
| 15 11, 5 | 1.2149155+002  | 1.2050652+002 | 1.4568999+004 | 1.7664781+006 |
| 15 11, 4 | 1.2149155+002  | 1.2050652+002 | 1.4568999+004 | 1.7664781+006 |
| 15 12, 4 | 1.4437111+002  | 1.4362756+002 | 2.0660123+004 | 2.9757428+006 |
| 15 12, 3 | 1.4437111+002  | 1.4362756+002 | 2.0660123+004 | 2.9757428+006 |
| 15 13, 3 | 1.6926000+002  | 1.6873911+002 | 2.8490758+004 | 4.8129787+006 |
| 15 13, 2 | 1.6926000+002  | 1.6873911+002 | 2.8490758+004 | 4.8129787+006 |
| 15 14, 2 | 1.9615424+002  | 1.9584524+002 | 3.8363414+004 | 7.5160277+006 |
| 15 14, 1 | 1.9615424+002  | 1.9584524+002 | 3.8363414+004 | 7.5160277+006 |
| 15 15, 1 | 2.2505115+002  | 2.2494868+002 | 5.0604786+004 | 1.1384613+007 |
| 15 15, 0 | 2.2505115+002  | 2.2494868+002 | 5.0604786+004 | 1.1384613+007 |

KAPPA = -0.800000

|        |                |               |               |               |
|--------|----------------|---------------|---------------|---------------|
| 2 0, 2 | -8.2930556-003 | 8.2588102-003 | 3.3035241-002 | 1.3214096-001 |
| 2 1, 2 | 8.4210526-001  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 1, 1 | 1.1578947+000  | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 2, 1 | 4.0000000+000  | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 2 2, 0 | 4.0082931+000  | 3.9917412+000 | 1.5966965+001 | 6.3867859+001 |

TABLE II.--EXPECTATION VALUES--CONTINUED

| KAPPA = -0.800000 --CONTINUED |                 |                |                |                |
|-------------------------------|-----------------|----------------|----------------|----------------|
| 3 0, 3                        | -4.1128361--002 | 4.0299632--002 | 1.6119853--001 | 6.4479411--001 |
| 3 1, 3                        | 6.7921686--001  | 1.0047983+000  | 1.0479827+000  | 1.4366430+000  |
| 3 1, 2                        | 1.3103859+000   | 1.0056177+000  | 1.0561772+000  | 1.5112123+000  |
| 3 2, 2                        | 4.0000000+000   | 4.0000000+000  | 1.6000000+001  | 6.4000000+001  |
| 3 2, 1                        | 4.0411284+000   | 3.9597004+000  | 1.5838801+001  | 6.3355206+001  |
| 3 3, 1                        | 9.0049937+000   | 8.9952017+000  | 8.0952017+001  | 7.2856336+002  |
| 3 3, 0                        | 9.0054036+000   | 8.9943823+000  | 8.0943823+001  | 7.2848879+002  |
| 4 0, 4                        | -1.2113124--001 | 1.1447901--001 | 4.5955404--001 | 1.8644238+000  |
| 4 1, 4                        | 4.5326527--001  | 1.0190672+000  | 1.1906718+000  | 2.7351137+000  |
| 4 1, 3                        | 1.5030377+000   | 1.0247632+000  | 1.2476317+000  | 3.2534487+000  |
| 4 2, 3                        | 3.9935400+000   | 4.0064531+000  | 1.6129062+001  | 6.6168242+001  |
| 4 2, 2                        | 4.1146544+000   | 3.8920245+000  | 1.5670449+001  | 6.4319408+001  |
| 4 3, 2                        | 9.0204189+000   | 8.9809328+000  | 8.0809328+001  | 7.2726489+002  |
| 4 3, 1                        | 9.0232781+000   | 8.9752368+000  | 8.0752368+001  | 7.2674655+002  |
| 4 4, 1                        | 1.6006460+001   | 1.5993547+001  | 2.5587094+002  | 4.0938318+003  |
| 4 4, 0                        | 1.6006477+001   | 1.5993496+001  | 2.5587000+002  | 4.0938162+003  |
| 5 0, 5                        | -2.7342506--001 | 2.4259152--001 | 9.8346142--001 | 4.1433714+000  |
| 5 1, 5                        | 1.5786503--001  | 1.0474191+000  | 1.4746502+000  | 5.3312174+000  |
| 5 1, 4                        | 1.7254536+000   | 1.0698893+000  | 1.6996644+000  | 7.3869262+000  |
| 5 2, 4                        | 3.9751208+000   | 4.0247764+000  | 1.6495529+001  | 7.2324881+001  |
| 5 2, 3                        | 4.2483951+000   | 3.7826368+000  | 1.5520499+001  | 6.8321226+001  |
| 5 3, 3                        | 9.0448651+000   | 8.9603875+000  | 8.0790703+001  | 7.3193425+002  |
| 5 3, 2                        | 9.0562232+000   | 8.9379198+000  | 8.0565764+001  | 7.2988051+002  |
| 5 4, 2                        | 1.6024879+001   | 1.5975224+001  | 2.5550447+002  | 4.0876751+003  |
| 5 4, 1                        | 1.6025030+001   | 1.5974772+001  | 2.5549604+002  | 4.0875354+003  |
| 5 5, 1                        | 2.5007796+001   | 2.4992193+001  | 6.2473465+002  | 1.5617735+004  |
| 5 5, 0                        | 2.5007797+001   | 2.4992191+001  | 6.2473457+002  | 1.5617733+004  |
| 6 0, 6                        | -5.2000386--001 | 4.2089195--001 | 1.7384118+000  | 7.8320528+000  |
| 6 1, 6                        | -2.1370979--001 | 1.0934474+000  | 1.9376916+000  | 9.6163379+000  |
| 6 1, 5                        | 1.9631471+000   | 1.1592158+000  | 2.5987229+000  | 1.5718413+001  |
| 6 2, 5                        | 3.9379644+000   | 4.0614588+000  | 1.7229758+001  | 8.4682779+001  |
| 6 2, 4                        | 4.4572172+000   | 3.6428112+000  | 1.5533236+001  | 7.7545984+001  |
| 6 3, 4                        | 9.0798603+000   | 8.9351752+000  | 8.1034936+001  | 7.4701238+002  |
| 6 3, 3                        | 9.1135229+000   | 8.8694341+000  | 8.0374724+001  | 7.4093189+002  |
| 6 4, 3                        | 1.6052888+001   | 1.5947702+001  | 2.5524647+002  | 4.0948042+003  |
| 6 4, 2                        | 1.6053639+001   | 1.5945458+001  | 2.5520459+002  | 4.0941091+003  |
| 6 5, 2                        | 2.5028586+001   | 2.4971377+001  | 6.2402737+002  | 1.5598371+004  |
| 6 5, 1                        | 2.5028593+001   | 2.4971350+001  | 6.2402655+002  | 1.5598350+004  |
| 6 6, 1                        | 3.6009148+001   | 3.5990839+001  | 1.2955238+003  | 4.6636513+004  |
| 6 6, 0                        | 3.6009148+001   | 3.5990839+001  | 1.2955238+003  | 4.6636513+004  |
| 7 0, 7                        | -8.7532159--001 | 6.3132827--001 | 2.6848161+000  | 1.3300411+001  |
| 7 1, 7                        | -6.6794572--001 | 1.1590523+000  | 2.6031822+000  | 1.5916993+001  |
| 7 1, 6                        | 2.1968810+000   | 1.3168837+000  | 4.2007567+000  | 3.0954037+001  |
| 7 2, 6                        | 3.8741462+000   | 4.1236775+000  | 1.8477686+001  | 1.0578726+002  |
| 7 2, 5                        | 4.7467314+000   | 3.5004914+000  | 1.5945000+001  | 9.5022662+001  |
| 7 3, 5                        | 9.1256551+000   | 8.9096280+000  | 8.1730245+001  | 7.7799598+002  |
| 7 3, 4                        | 9.2081559+000   | 8.7519597+000  | 8.0137563+001  | 7.6308802+002  |
| 7 4, 4                        | 1.6093419+001   | 1.5908806+001  | 2.5521053+002  | 4.1232856+003  |
| 7 4, 3                        | 1.6096155+001   | 1.5900665+001  | 2.5505846+002  | 4.1207522+003  |
| 7 5, 3                        | 2.5058096+001   | 2.4941845+001  | 6.2344527+002  | 1.5605815+004  |
| 7 5, 2                        | 2.5058137+001   | 2.4941682+001  | 6.2344037+002  | 1.5605686+004  |
| 7 6, 2                        | 3.6032435+001   | 3.5967517+001  | 1.2943118+003  | 4.6586927+004  |
| 7 6, 1                        | 3.6032435+001   | 3.5967515+001  | 1.2943117+003  | 4.6586925+004  |
| 7 7, 1                        | 4.9010511+001   | 4.8989475+001  | 2.4002213+003  | 1.1760427+005  |
| 7 7, 0                        | 4.9010511+001   | 4.8989474+001  | 2.4002213+003  | 1.1760427+005  |
| 8 0, 8                        | -1.3457239+000  | 8.5260257--001 | 3.7742572+000  | 2.0965663+001  |
| 8 1, 8                        | -1.2106334+000  | 1.2442371+000  | 3.4790085+000  | 2.4509407+001  |
| 8 1, 7                        | 2.4026404+000   | 1.5698906+000  | 6.8136167+000  | 5.6880447+001  |
| 8 2, 7                        | 3.7748130+000   | 4.2187034+000  | 2.0391003+001  | 1.3843291+002  |
| 8 2, 6                        | 5.1124059+000   | 3.3901354+000  | 1.7066852+001  | 1.2502987+002  |
| 8 3, 6                        | 9.1807726+000   | 8.8909669+000  | 8.3114737+001  | 8.3146644+002  |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.80000 —CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 8 3, 5   | 9.3567962+000  | 8.5660160+000 | 7.9801199+001 | 7.9965251+002 |
| 8 4, 5   | 1.6149500+001  | 1.5857109+001 | 2.5554809+002 | 4.1827639+003 |
| 8 4, 4   | 1.6157629+001  | 1.5833084+001 | 2.5509841+002 | 4.1752178+003 |
| 8 5, 4   | 2.5098740+001  | 2.4901234+001 | 6.2310134+002 | 1.5653812+004 |
| 8 5, 3   | 2.5098916+001  | 2.4900531+001 | 6.2308027+002 | 1.5653255+004 |
| 8 6, 3   | 3.6063807+001  | 3.5936085+001 | 1.2932503+003 | 4.6586330+004 |
| 8 6, 2   | 3.6063809+001  | 3.5936075+001 | 1.2932499+003 | 4.6586313+004 |
| 8 7, 2   | 4.9036384+001  | 4.8963562+001 | 2.3983049+003 | 1.1749421+005 |
| 8 7, 1   | 4.9036384+001  | 4.8963562+001 | 2.3983049+003 | 1.1749421+005 |
| 8 8, 1   | 6.4011880+001  | 6.3988103+001 | 4.0948106+003 | 2.6205247+005 |
| 8 8, 0   | 6.4011880+001  | 6.3988103+001 | 4.0948106+003 | 2.6205247+005 |
| 9 0, 9   | -1.9319825+000 | 1.0697202+000 | 4.9785265+000 | 3.1276616+001 |
| 9 1, 9   | -1.8465951+000 | 1.3473794+000 | 4.5604945+000 | 3.5654049+001 |
| 9 1, 8   | 2.5530403+000  | 1.9395776+000 | 1.0729531+001 | 9.8219882+001 |
| 9 2, 8   | 3.6304931+000  | 4.3531159+000 | 2.3114344+001 | 1.8556245+002 |
| 9 2, 7   | 5.5416253+000  | 3.3444264+000 | 1.9283318+001 | 1.7381235+002 |
| 9 3, 7   | 9.2417573+000  | 8.8889361+000 | 8.5471537+001 | 9.1510999+002 |
| 9 3, 6   | 9.5783507+000  | 8.2991741+000 | 7.9375628+001 | 8.5448549+002 |
| 9 4, 6   | 1.6223937+001  | 1.5792726+001 | 2.5646201+002 | 4.2846624+003 |
| 9 4, 5   | 1.6244778+001  | 1.5731744+001 | 2.5531665+002 | 4.2652184+003 |
| 9 5, 5   | 2.5153248+001  | 2.4846985+001 | 6.2312777+002 | 1.5758039+004 |
| 9 5, 4   | 2.5153862+001  | 2.4844549+001 | 6.2305467+002 | 1.5756100+004 |
| 9 6, 4   | 3.6105176+001  | 3.5894610+001 | 1.2924671+003 | 4.6656889+004 |
| 9 6, 3   | 3.6105186+001  | 3.5894561+001 | 1.2924649+003 | 4.6656806+004 |
| 9 7, 3   | 4.9069915+001  | 4.8929972+001 | 2.3965652+003 | 1.1746677+005 |
| 9 7, 2   | 4.9069915+001  | 4.8929972+001 | 2.3965652+003 | 1.1746676+005 |
| 9 8, 2   | 6.4040393+001  | 6.3959548+001 | 4.0919566+003 | 2.6183289+005 |
| 9 8, 1   | 6.4040393+001  | 6.3959548+001 | 4.0919566+003 | 2.6183289+005 |
| 9 9, 1   | 8.1013254+001  | 8.0986728+001 | 6.5592750+003 | 5.3126943+005 |
| 9 9, 0   | 8.1013254+001  | 8.0986728+001 | 6.5592750+003 | 5.3126943+005 |
| 10 0, 10 | -2.6323229+000 | 1.2759660+000 | 6.2931115+000 | 4.4670853+001 |
| 10 1, 10 | -2.5796026+000 | 1.4658050+000 | 5.8355186+000 | 4.9629657+001 |
| 10 1, 9  | 2.6207104+000  | 2.4292171+000 | 1.6112009+001 | 1.5992430+002 |
| 10 2, 9  | 3.4314902+000  | 4.5319384+000 | 2.6771225+001 | 2.5016039+002 |
| 10 2, 8  | 6.0160970+000  | 3.3936612+000 | 2.3082861+001 | 2.5064120+002 |
| 10 3, 8  | 9.3031386+000  | 8.9150334+000 | 8.9119320+001 | 1.0377326+003 |
| 10 3, 7  | 9.8904748+000  | 7.9588370+000 | 7.9059764+001 | 9.3323367+002 |
| 10 4, 7  | 1.6318918+001  | 1.5718187+001 | 2.5822149+002 | 4.4424477+003 |
| 10 4, 6  | 1.6366595+001  | 1.5580692+001 | 2.5562526+002 | 4.3976252+003 |
| 10 5, 6  | 2.5224618+001  | 2.4776547+001 | 6.2368101+002 | 1.5936181+004 |
| 10 5, 5  | 2.5226442+001  | 2.4769334+001 | 6.2346425+002 | 1.5930395+004 |
| 10 6, 5  | 3.6158703+001  | 3.5840902+001 | 1.2921042+003 | 4.6823342+004 |
| 10 6, 4  | 3.6158742+001  | 3.5840708+001 | 1.2920956+003 | 4.6823013+004 |
| 10 7, 4  | 4.9112670+001  | 4.8887118+001 | 2.3951473+003 | 1.1755558+005 |
| 10 7, 3  | 4.9112670+001  | 4.8887115+001 | 2.3951472+003 | 1.1755557+005 |
| 10 8, 3  | 6.4076258+001  | 6.3923624+001 | 4.0893054+003 | 2.6174424+005 |
| 10 8, 2  | 6.4076258+001  | 6.3923624+001 | 4.0893054+003 | 2.6174424+005 |
| 10 9, 2  | 8.1044440+001  | 8.0955497+001 | 6.5552168+003 | 5.3086588+005 |
| 10 9, 1  | 8.1044440+001  | 8.0955497+001 | 6.5552168+003 | 5.3086588+005 |
| 10 10, 1 | 1.0001463+002  | 9.9985349+001 | 9.9975978+003 | 9.9969981+005 |
| 10 10, 0 | 1.0001463+002  | 9.9985349+001 | 9.9975978+003 | 9.9969981+005 |
| 11 0, 11 | -3.4444016+000 | 1.4703122+000 | 7.7269783+000 | 6.1545298+001 |
| 11 1, 11 | -3.4124463+000 | 1.5964257+000 | 7.2896289+000 | 6.6752495+001 |
| 11 1, 10 | 2.5828982+000  | 3.0165014+000 | 2.2908098+001 | 2.4612101+002 |
| 11 2, 10 | 3.1683240+000  | 4.7578850+000 | 3.1451702+001 | 3.3516068+002 |
| 11 2, 9  | 6.5131689+000  | 3.5690001+000 | 2.9096000+001 | 3.6910294+002 |
| 11 3, 9  | 9.3575862+000  | 8.9815301+000 | 9.4399067+001 | 1.2092562+003 |
| 11 3, 8  | 1.0304800+001  | 7.5803670+000 | 7.9350619+001 | 1.0452581+003 |
| 11 4, 8  | 1.6435569+001  | 1.5639181+001 | 2.6117524+002 | 4.6719420+003 |
| 11 4, 7  | 1.6534994+001  | 1.5358407+001 | 2.5583272+002 | 4.5775688+003 |
| 11 5, 7  | 2.5316020+001  | 2.4687732+001 | 6.2495104+002 | 1.6208115+004 |
| 11 5, 6  | 2.5320828+001  | 2.4668833+001 | 6.2438181+002 | 1.6192787+004 |



TABLE II.--EXPECTATION VALUES--CONTINUED

KAPPA = -0.800000 --CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 11 6, 6  | 3.6226795+001  | 3.5772523+001 | 1.2923180+003 | 4.7112931+004 |
| 11 6, 5  | 3.6226927+001  | 3.5771870+001 | 1.2922892+003 | 4.7111818+004 |
| 11 7, 5  | 4.9166398+001  | 4.8833216+001 | 2.3942105+003 | 1.1779778+005 |
| 11 7, 4  | 4.9166401+001  | 4.8833203+001 | 2.3942097+003 | 1.1779773+005 |
| 11 8, 4  | 6.4120801+001  | 6.3878990+001 | 4.0870194+003 | 2.6183510+005 |
| 11 8, 3  | 6.4120801+001  | 6.3878990+001 | 4.0870194+003 | 2.6183510+005 |
| 11 9, 3  | 8.1082749+001  | 8.0917126+001 | 6.5513874+003 | 5.3065996+005 |
| 11 9, 2  | 8.1082749+001  | 8.0917126+001 | 6.5513874+003 | 5.3065996+005 |
| 11 10, 2 | 1.0004851+002  | 9.9951420+001 | 9.9920357+003 | 9.9900487+005 |
| 11 10, 1 | 1.0004851+002  | 9.9951420+001 | 9.9920357+003 | 9.9900487+005 |
| 11 11, 1 | 1.2101601+002  | 1.2098397+002 | 1.4637762+004 | 1.7710641+006 |
| 11 11, 0 | 1.2101601+002  | 1.2098397+002 | 1.4637762+004 | 1.7710641+006 |
| 12 0,12  | -4.3661755+000 | 1.6543896+000 | 9.2925837+000 | 8.2253013+001 |
| 12 1,12  | -4.3470915+000 | 1.7362514+000 | 8.9097051+000 | 8.7377952+001 |
| 12 1,11  | 2.4249864+000  | 3.6603499+000 | 3.0878083+001 | 3.5948087+002 |
| 12 2,11  | 2.8321607+000  | 5.0309346+000 | 3.7205073+001 | 4.4338643+002 |
| 12 2,10  | 7.0062864+000  | 3.9037036+000 | 3.8096975+001 | 5.4819304+002 |
| 12 3,10  | 9.3962094+000  | 9.1004281+000 | 1.0165732+002 | 1.4406645+003 |
| 12 3, 9  | 1.0823148+001  | 7.2212223+000 | 8.1046985+001 | 1.2056480+003 |
| 12 4, 9  | 1.6573524+001  | 1.5564955+001 | 2.6575899+002 | 4.9916593+003 |
| 12 4, 8  | 1.6765183+001  | 1.5039735+001 | 2.5565991+002 | 4.8079271+003 |
| 12 5, 8  | 2.5430655+001  | 2.4579256+001 | 6.2717611+002 | 1.6596258+004 |
| 12 5, 7  | 2.5442157+001  | 2.4534413+001 | 6.2582105+002 | 1.6559331+004 |
| 12 6, 7  | 3.6312105+001  | 3.5686831+001 | 1.2932799+003 | 4.7555345+004 |
| 12 6, 6  | 3.6312496+001  | 3.5684894+001 | 1.2931945+003 | 4.7552022+004 |
| 12 7, 6  | 4.9233034+001  | 4.8766279+001 | 2.3939271+003 | 1.1823382+005 |
| 12 7, 5  | 4.9233043+001  | 4.8766230+001 | 2.3939242+003 | 1.1823366+005 |
| 12 8, 5  | 6.4175484+001  | 6.3824161+001 | 4.0852757+003 | 2.6215860+005 |
| 12 8, 4  | 6.4175484+001  | 6.3824160+001 | 4.0852757+003 | 2.6215859+005 |
| 12 9, 4  | 8.1129330+001  | 8.0870459+001 | 6.5479664+003 | 5.3071907+005 |
| 12 9, 3  | 8.1129330+001  | 8.0870459+001 | 6.5479664+003 | 5.3071907+005 |
| 12 10, 3 | 1.0008934+002  | 9.9910530+001 | 9.9867283+003 | 9.9859672+005 |
| 12 10, 2 | 1.0008934+002  | 9.9910530+001 | 9.9867283+003 | 9.9859672+005 |
| 12 11, 2 | 1.2105260+002  | 1.2094733+002 | 1.4630363+004 | 1.7699288+006 |
| 12 11, 1 | 1.2105260+002  | 1.2094733+002 | 1.4630363+004 | 1.7699288+006 |
| 12 12, 1 | 1.4401739+002  | 1.4398259+002 | 2.0731752+004 | 2.9851983+006 |
| 12 12, 0 | 1.4401739+002  | 1.4398259+002 | 2.0731752+004 | 2.9851983+006 |
| 13 0,13  | -5.3961242+000 | 1.8305633+000 | 1.1000548+001 | 1.0711643+002 |
| 13 1,13  | -5.3848648+000 | 1.8827010+000 | 1.0685774+001 | 1.1189002+002 |
| 13 1,12  | 2.1409188+000  | 4.3184365+000 | 3.9731472+001 | 5.0151713+002 |
| 13 2,12  | 2.4151662+000  | 5.3483810+000 | 4.4039820+001 | 5.7753112+002 |
| 13 2,11  | 7.4655897+000  | 4.4282879+000 | 5.0914650+001 | 8.1221926+002 |
| 13 3,11  | 9.4089564+000  | 9.2824279+000 | 1.1122590+002 | 1.7438596+003 |
| 13 3,10  | 1.1436719+001  | 6.9447278+000 | 8.5161085+001 | 1.4370008+003 |
| 13 4,10  | 1.6730584+001  | 1.5508172+001 | 2.7249397+002 | 5.4231338+003 |
| 13 4, 9  | 1.7075233+001  | 1.4602889+001 | 2.5484755+002 | 5.0903141+003 |
| 13 5, 9  | 2.5571533+001  | 2.4451478+001 | 6.3066322+002 | 1.7126126+004 |
| 13 5, 8  | 2.5596907+001  | 2.4353606+001 | 6.2769224+002 | 1.7043885+004 |
| 13 6, 8  | 3.6417517+001  | 3.5581072+001 | 1.2951793+003 | 4.8182749+004 |
| 13 6, 7  | 3.6418568+001  | 3.5575888+001 | 1.2949506+003 | 4.8173782+004 |
| 13 7, 7  | 4.9314701+001  | 4.8684100+001 | 2.3944816+003 | 1.1890739+005 |
| 13 7, 6  | 4.9314728+001  | 4.8683937+001 | 2.3944718+003 | 1.1890686+005 |
| 13 8, 6  | 6.4241910+001  | 6.3757495+001 | 4.0842651+003 | 2.6277227+005 |
| 13 8, 5  | 6.4241910+001  | 6.3757492+001 | 4.0842649+003 | 2.6277225+005 |
| 13 9, 5  | 8.1185437+001  | 8.0814223+001 | 6.5451485+003 | 5.3111636+005 |
| 13 9, 4  | 8.1185437+001  | 8.0814222+001 | 6.5451485+003 | 5.3111636+005 |
| 13 10, 4 | 1.0013812+002  | 9.9861660+001 | 9.9818722+003 | 9.9856591+005 |
| 13 10, 3 | 1.0013812+002  | 9.9861660+001 | 9.9818722+003 | 9.9856591+005 |
| 13 11, 3 | 1.2109600+002  | 1.2090386+002 | 1.4623245+004 | 1.7691964+006 |
| 13 11, 2 | 1.2109600+002  | 1.2090386+002 | 1.4623245+004 | 1.7691964+006 |
| 13 12, 2 | 1.4405670+002  | 1.4394322+002 | 2.0722150+004 | 2.9834224+006 |

TABLE II.--EXPECTATION VALUES--CONTINUED

KAPPA = -0.800000--CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 13 12, 1 | 1.4405670+002  | 1.4394322+002 | 2.0722150+004 | 2.9834224+006 |
| 13 13, 1 | 1.6901877+002  | 1.6898121+002 | 2.8555550+004 | 4.8256130+006 |
| 13 13, 0 | 1.6901877+002  | 1.6898121+002 | 2.8555550+004 | 4.8256130+006 |
| 14 0,14  | -6.5332045+000 | 2.0010394+000 | 1.2858037+001 | 1.3644447+002 |
| 14 1,14  | -6.5266286+000 | 2.0337227+000 | 1.2611346+001 | 1.4068665+002 |
| 14 1,13  | 1.7308666+000  | 4.9612633+000 | 4.9252937+001 | 6.7338951+002 |
| 14 2,13  | 1.9107307+000  | 5.7053544+000 | 5.1930645+001 | 7.4017609+002 |
| 14 2,12  | 7.8597006+000  | 5.1584602+000 | 6.8215074+001 | 1.1881059+003 |
| 14 3,12  | 9.3850766+000  | 9.5359538+000 | 1.2339900+002 | 2.1314023+003 |
| 14 3,11  | 1.2127894+001  | 6.8075092+000 | 9.2852744+001 | 1.7715399+003 |
| 14 4,11  | 1.6902516+001  | 1.5484220+001 | 2.8197518+002 | 5.9911997+003 |
| 14 4,10  | 1.7484155+001  | 1.4042812+001 | 2.5339635+002 | 5.4291543+003 |
| 14 5,10  | 2.5741175+001  | 2.4307267+001 | 6.3581324+002 | 1.7827128+004 |
| 14 5, 9  | 2.5793412+001  | 2.4108656+001 | 6.2974732+002 | 1.7655862+004 |
| 14 6, 9  | 3.6546114+001  | 3.5452570+001 | 1.2982302+003 | 4.9029932+004 |
| 14 6, 8  | 3.6548708+001  | 3.5439845+001 | 1.2976676+003 | 4.9007670+004 |
| 14 7, 8  | 4.9413717+001  | 4.8584252+001 | 2.3960690+003 | 1.1986517+005 |
| 14 7, 7  | 4.9413798+001  | 4.8583768+001 | 2.3960396+003 | 1.1986359+005 |
| 14 8, 7  | 6.4321824+001  | 6.3677185+001 | 4.0841907+003 | 2.6373787+005 |
| 14 8, 6  | 6.4321825+001  | 6.3677173+001 | 4.0841898+003 | 2.6373781+005 |
| 14 9, 6  | 8.1252434+001  | 8.0747026+001 | 6.5431424+003 | 5.3193064+005 |
| 14 9, 5  | 8.1252434+001  | 8.0747025+001 | 6.5431424+003 | 5.3193063+005 |
| 14 10, 5 | 1.0019596+002  | 9.9803700+001 | 9.9776795+003 | 9.9901012+005 |
| 14 10, 4 | 1.0019596+002  | 9.9803700+001 | 9.9776795+003 | 9.9901012+005 |
| 14 11, 4 | 1.2114710+002  | 1.2085268+002 | 1.4616620+004 | 1.7689853+006 |
| 14 11, 3 | 1.2114710+002  | 1.2085268+002 | 1.4616620+004 | 1.7689853+006 |
| 14 12, 3 | 1.4410270+002  | 1.4389715+002 | 2.0712853+004 | 2.9821974+006 |
| 14 12, 2 | 1.4410270+002  | 1.4389715+002 | 2.0712853+004 | 2.9821974+006 |
| 14 13, 2 | 1.6906081+002  | 1.6893910+002 | 2.8543345+004 | 4.8229346+006 |
| 14 13, 1 | 1.6906081+002  | 1.6893910+002 | 2.8543345+004 | 4.8229346+006 |
| 14 14, 1 | 1.9602015+002  | 1.9597982+002 | 3.8409140+004 | 7.5277733+006 |
| 14 14, 0 | 1.9602015+002  | 1.9597982+002 | 3.8409140+004 | 7.5277733+006 |
| 15 0,15  | -7.7767333+000 | 2.1675724+000 | 1.4869019+001 | 1.7054622+002 |
| 15 1,15  | -7.7729257+000 | 2.1877858+000 | 1.4682886+001 | 1.7416704+002 |
| 15 1,14  | 1.1981249+000  | 5.5751922+000 | 5.9341565+001 | 8.7649790+002 |
| 15 2,14  | 1.3135449+000  | 6.0956525+000 | 6.0830132+001 | 9.3382825+002 |
| 15 2,13  | 8.1591510+000  | 6.0807470+000 | 9.0211287+001 | 1.6996656+003 |
| 15 3,13  | 9.3136155+000  | 9.8663108+000 | 1.3841004+002 | 2.6161429+003 |
| 15 3,12  | 1.2872731+001  | 6.8576315+000 | 1.0544982+002 | 2.2541920+003 |
| 15 4,12  | 1.7083039+001  | 1.5510067+001 | 2.9484991+002 | 6.7241642+003 |
| 15 4,11  | 1.8008203+001  | 1.3386464+001 | 2.5189011+002 | 5.8395178+003 |
| 15 5,11  | 2.5941259+001  | 2.4152855+001 | 6.4314673+002 | 1.8733594+004 |
| 15 5,10  | 2.6042450+001  | 2.3775443+001 | 6.3152828+002 | 1.8397523+004 |
| 15 6,10  | 3.6701114+001  | 3.5299054+001 | 1.3026840+003 | 5.0134703+004 |
| 15 6, 9  | 3.6707072+001  | 3.5270029+001 | 1.3013967+003 | 5.0083183+004 |
| 15 7, 9  | 4.9532599+001  | 4.8464091+001 | 2.3988942+003 | 1.2115674+005 |
| 15 7, 8  | 4.9532821+001  | 4.8462776+001 | 2.3988143+003 | 1.2115244+005 |
| 15 8, 8  | 6.4417119+001  | 6.3581248+001 | 4.0852665+003 | 2.6512122+005 |
| 15 8, 7  | 6.4417124+001  | 6.3581209+001 | 4.0852634+003 | 2.6512101+005 |
| 15 9, 7  | 8.1331796+001  | 8.0667352+001 | 6.5421701+003 | 5.3324613+005 |
| 15 9, 6  | 8.1331796+001  | 8.0667351+001 | 6.5421700+003 | 5.3324612+005 |
| 15 10, 6 | 1.0026404+002  | 9.9735444+001 | 9.9743766+003 | 1.0000340+006 |
| 15 10, 5 | 1.0026404+002  | 9.9735444+001 | 9.9743766+003 | 1.0000340+006 |
| 15 11, 5 | 1.2120689+002  | 1.2079277+002 | 1.4610719+004 | 1.7694228+006 |
| 15 11, 4 | 1.2120689+002  | 1.2079277+002 | 1.4610719+004 | 1.7694228+006 |
| 15 12, 4 | 1.4415621+002  | 1.4384356+002 | 2.0704094+004 | 2.9816749+006 |
| 15 12, 3 | 1.4415621+002  | 1.4384356+002 | 2.0704094+004 | 2.9816749+006 |
| 15 13, 3 | 1.6910945+002  | 1.6889040+002 | 2.8531471+004 | 4.8209922+006 |
| 15 13, 2 | 1.6910945+002  | 1.6889040+002 | 2.8531471+004 | 4.8209922+006 |
| 15 14, 2 | 1.9606493+002  | 1.9593498+002 | 3.8393899+004 | 7.5238572+006 |
| 15 14, 1 | 1.9606493+002  | 1.9593498+002 | 3.8393899+004 | 7.5238572+006 |
| 15 15, 1 | 2.2502153+002  | 2.2497844+002 | 5.0616505+004 | 1.1388098+007 |
| 15 15, 0 | 2.2502153+002  | 2.2497844+002 | 5.0616505+004 | 1.1388098+007 |

TABLE II.--EXPECTATION VALUES--CONTINUED

KAPPA = -0.900000

|        |                 |               |               |               |
|--------|-----------------|---------------|---------------|---------------|
| 2 0, 2 | -1.9714150-003  | 1.9694736-003 | 7.8778946-003 | 3.1511578-002 |
| 2 1, 2 | 9.2307692-001   | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 1, 1 | 1.0769231+000   | 1.0000000+000 | 1.0000000+000 | 1.0000000+000 |
| 2 2, 1 | 4.0000000+000   | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 2 2, 0 | 4.0019714+000   | 3.9980305+000 | 1.5992122+001 | 6.3968488+001 |
| 3 0, 3 | -9.8377377-003  | 9.7895840-003 | 3.9158336-002 | 1.5663334-001 |
| 3 1, 3 | 8.4494454-001   | 1.0011861+000 | 1.0118613+000 | 1.1079382+000 |
| 3 1, 2 | 1.1525894+000   | 1.0012809+000 | 1.0128094+000 | 1.1165658+000 |
| 3 2, 2 | 4.0000000+000   | 4.0000000+000 | 1.6000000+001 | 6.4000000+001 |
| 3 2, 1 | 4.0098377+000   | 3.9902104+000 | 1.5960842+001 | 6.3843367+001 |
| 3 3, 1 | 9.0012093+000   | 8.9988139+000 | 8.0988139+001 | 7.2889206+002 |
| 3 3, 0 | 9.0012567+000   | 8.9987191+000 | 8.0987191+001 | 7.2888343+002 |
| 4 0, 4 | --2.9378460-002 | 2.8969640-002 | 1.1597816-001 | 4.6550623-001 |
| 4 1, 4 | 7.3857607-001   | 1.0048521+000 | 1.0485208+000 | 1.4415393+000 |
| 4 1, 3 | 1.2510650+000   | 1.0055146+000 | 1.0551465+000 | 1.5018330+000 |
| 4 2, 3 | 3.9984661+000   | 4.0015335+000 | 1.6030670+001 | 6.4515253+001 |
| 4 2, 2 | 4.0278436+000   | 3.9725667+000 | 1.5914745+001 | 6.4050624+001 |
| 4 3, 2 | 9.0050137+000   | 8.9951479+000 | 8.0951479+001 | 7.2855846+002 |
| 4 3, 1 | 9.0053453+000   | 8.9944854+000 | 8.0944854+001 | 7.2849817+002 |
| 4 4, 1 | 1.6001534+001   | 1.5998467+001 | 2.5596933+002 | 4.0954847+003 |
| 4 4, 0 | 1.6001535+001   | 1.5998464+001 | 2.5596928+002 | 4.0954839+003 |
| 5 0, 5 | --6.7954163-002 | 6.5863525-002 | 2.6432263-001 | 1.0711869+000 |
| 5 1, 5 | 6.0222998-001   | 1.0125156+000 | 1.1251861+000 | 2.1399664+000 |
| 5 1, 4 | 1.3701365+000   | 1.0151574+000 | 1.1516125+000 | 2.3806719+000 |
| 5 2, 4 | 3.9940858+000   | 4.0059084+000 | 1.6118168+001 | 6.5985229+001 |
| 5 2, 3 | 4.0620314+000   | 3.9400704+000 | 1.5854322+001 | 6.4921934+001 |
| 5 3, 3 | 9.0113052+000   | 8.9893344+000 | 8.0937711+001 | 7.2958227+002 |
| 5 3, 2 | 9.0126294+000   | 8.9866927+000 | 8.0911287+001 | 7.2934162+002 |
| 5 4, 2 | 1.6005914+001   | 1.5994092+001 | 2.5588183+002 | 4.0940148+003 |
| 5 4, 1 | 1.6005923+001   | 1.5994066+001 | 2.5588136+002 | 4.0940069+003 |
| 5 5, 1 | 2.5001849+001   | 2.4998150+001 | 6.2493710+002 | 1.5623278+004 |
| 5 5, 0 | 2.5001849+001   | 2.4998150+001 | 6.2493710+002 | 1.5623278+004 |
| 6 0, 6 | -1.3394989-001  | 1.2620695-001 | 5.0894922-001 | 2.1017558+000 |
| 6 1, 6 | 4.3389364-001   | 1.0257619+000 | 1.2578413+000 | 3.3521096+000 |
| 6 1, 5 | 1.5068550+000   | 1.0336432+000 | 1.3367489+000 | 4.0726311+000 |
| 6 2, 5 | 3.9852236+000   | 4.0147434+000 | 1.6294901+001 | 6.8955645+001 |
| 6 2, 4 | 4.1191310+000   | 3.8886638+000 | 1.5788329+001 | 6.6893300+001 |
| 6 3, 4 | 9.0208635+000   | 8.9810217+000 | 8.0972770+001 | 7.3296233+002 |
| 6 3, 3 | 9.0248251+000   | 8.9731412+000 | 8.0893885+001 | 7.3224240+002 |
| 6 4, 3 | 1.6012606+001   | 1.5987427+001 | 2.5581797+002 | 4.0956633+003 |
| 6 4, 2 | 1.6012649+001   | 1.5987300+001 | 2.5581559+002 | 4.0956238+003 |
| 6 5, 2 | 2.5006781+001   | 2.4993216+001 | 6.2476939+002 | 1.5618686+004 |
| 6 5, 1 | 2.5006781+001   | 2.4993216+001 | 6.2476937+002 | 1.5618685+004 |
| 6 6, 1 | 3.6002170+001   | 3.5997829+001 | 1.2958871+003 | 4.6651381+004 |
| 6 6, 0 | 3.6002170+001   | 3.5997829+001 | 1.2958871+003 | 4.6651381+004 |
| 7 0, 7 | --2.3592008-001 | 2.1323296-001 | 8.6691254-001 | 3.6915380+000 |
| 7 1, 7 | 2.3137973-001   | 1.0460776+000 | 1.4617139+000 | 5.2258842+000 |
| 7 1, 6 | 1.6574166+000   | 1.0656050+000 | 1.6575526+000 | 7.0226582+000 |
| 7 2, 6 | 3.9699296+000   | 4.0299443+000 | 1.6599125+001 | 7.4074689+001 |
| 7 2, 5 | 4.2056941+000   | 3.8171772+000 | 1.5740910+001 | 7.0527482+001 |
| 7 3, 5 | 9.0343961+000   | 8.9702037+000 | 8.1091745+001 | 7.3993007+002 |
| 7 3, 4 | 9.0442556+000   | 8.9506808+000 | 8.0896041+001 | 7.3813686+002 |
| 7 4, 4 | 1.6022377+001   | 1.5977752+001 | 2.5580104+002 | 4.1023005+003 |
| 7 4, 3 | 1.6022532+001   | 1.5977286+001 | 2.5579234+002 | 4.1021562+003 |
| 7 5, 3 | 2.5013782+001   | 2.4986213+001 | 6.2463110+002 | 1.5620446+004 |
| 7 5, 2 | 2.5013783+001   | 2.4986208+001 | 6.2463096+002 | 1.5620442+004 |
| 7 6, 2 | 3.6007694+001   | 3.5992304+001 | 1.2955998+003 | 4.6639625+004 |
| 7 6, 1 | 3.6007694+001   | 3.5992304+001 | 1.2955998+003 | 4.6639625+004 |
| 7 7, 1 | 4.9002493+001   | 4.8997506+001 | 2.4008154+003 | 1.1763840+005 |
| 7 7, 0 | 4.9002493+001   | 4.8997506+001 | 2.4008154+003 | 1.1763840+005 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.900000 —CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 8 0, 8   | -3.8159098-001 | 3.2622449-001 | 1.3426187+000 | 5.9752330+000 |
| 8 1, 8   | -7.5726995-003 | 1.0746977+000 | 1.7499125+000 | 7.9002554+000 |
| 8 1, 7   | 1.8170323+000  | 1.1170756+000 | 2.1761068+000 | 1.1841231+001 |
| 8 2, 7   | 3.9459524+000  | 4.0536646+000 | 1.7074291+001 | 8.2087264+001 |
| 8 2, 6   | 4.3270776+000  | 3.7288324+000 | 1.5757682+001 | 7.6544470+001 |
| 8 3, 6   | 9.0524374+000  | 8.9573725+000 | 8.1340257+001 | 7.5196145+002 |
| 8 3, 5   | 9.0739813+000  | 8.9150142+000 | 8.0914646+001 | 7.4803587+002 |
| 8 4, 5   | 1.6036095+001  | 1.5964295+001 | 2.5585943+002 | 4.1161232+003 |
| 8 4, 4   | 1.6036561+001  | 1.5962903+001 | 2.5583342+002 | 4.1156909+003 |
| 8 5, 4   | 2.5023428+001  | 2.4976563+001 | 6.2454865+002 | 1.5631834+004 |
| 8 5, 3   | 2.5023433+001  | 2.4976544+001 | 6.2454807+002 | 1.5631819+004 |
| 8 6, 3   | 3.6015134+001  | 3.5984860+001 | 1.2953482+003 | 4.6639484+004 |
| 8 6, 2   | 3.6015134+001  | 3.5984859+001 | 1.2953482+003 | 4.6639483+004 |
| 8 7, 2   | 4.9008631+001  | 4.8991366+001 | 2.4003612+003 | 1.1761230+005 |
| 8 7, 1   | 4.9008631+001  | 4.8991366+001 | 2.4003612+003 | 1.1761230+005 |
| 8 8, 1   | 6.4002818+001  | 6.3997181+001 | 4.0957181+003 | 2.6212231+005 |
| 8 8, 0   | 6.4002818+001  | 6.3997181+001 | 4.0957181+003 | 2.6212231+005 |
| 9 0, 9   | -5.7702922-001 | 4.6047750-001 | 1.9276484+000 | 9.0877044+000 |
| 9 1, 9   | -2.8520077-001 | 1.1124870+000 | 2.1324307+000 | 1.1501108+001 |
| 9 1, 8   | 1.9798085+000  | 1.1955670+000 | 2.9715180+000 | 1.9351673+001 |
| 9 2, 8   | 3.9107601+000  | 4.0882448+000 | 1.7768048+001 | 9.3826782+001 |
| 9 2, 7   | 4.4865823+000  | 3.6313682+000 | 1.5907729+001 | 8.5861936+001 |
| 9 3, 7   | 9.0752510+000  | 8.9436360+000 | 8.1775464+001 | 7.7078719+002 |
| 9 3, 6   | 9.1179171+000  | 8.8606239+000 | 8.0938415+001 | 7.6299044+002 |
| 9 4, 6   | 1.6054715+001  | 1.5946296+001 | 2.5602766+002 | 4.1396688+003 |
| 9 4, 5   | 1.6055922+001  | 1.5942696+001 | 2.5596036+002 | 4.1385470+003 |
| 9 5, 5   | 2.5036376+001  | 2.4963612+001 | 6.2455225+002 | 1.5656588+004 |
| 9 5, 4   | 2.5036393+001  | 2.4963544+001 | 6.2455021+002 | 1.5656534+004 |
| 9 6, 4   | 3.6024943+001  | 3.5975044+001 | 1.2951627+003 | 4.6656260+004 |
| 9 6, 3   | 3.6024943+001  | 3.5975044+001 | 1.2951627+003 | 4.6656259+004 |
| 9 7, 3   | 4.9016584+001  | 4.8983410+001 | 2.3999487+003 | 1.1760579+005 |
| 9 7, 2   | 4.9016584+001  | 4.8983410+001 | 2.3999487+003 | 1.1760579+005 |
| 9 8, 2   | 6.4009582+001  | 6.3990415+001 | 4.0950416+003 | 2.6207024+005 |
| 9 8, 1   | 6.4009582+001  | 6.3990415+001 | 4.0950416+003 | 2.6207024+005 |
| 9 9, 1   | 8.1003144+001  | 8.0996855+001 | 6.5605912+003 | 5.3140033+005 |
| 9 9, 0   | 8.1003144+001  | 8.0996855+001 | 6.5605912+003 | 5.3140033+005 |
| 10 0,10  | -8.2625988-001 | 6.0883588-001 | 2.6057752+000 | 1.3167791+001 |
| 10 1,10  | -6.0363228-001 | 1.1598735+000 | 2.6156482+000 | 1.6141178+001 |
| 10 1, 9  | 2.1386776+000  | 1.3098580+000 | 4.1396458+000 | 3.0636388+001 |
| 10 2, 9  | 3.8615708+000  | 4.1361279+000 | 1.8730862+001 | 1.1020419+002 |
| 10 2, 8  | 4.6850268+000  | 3.5356324+000 | 1.6281259+001 | 9.9652821+001 |
| 10 3, 8  | 9.1027455+000  | 8.9307797+000 | 8.2466521+001 | 7.9840149+002 |
| 10 3, 7  | 9.1808975+000  | 8.7809984+000 | 8.0948622+001 | 7.8406758+002 |
| 10 4, 7  | 1.6079241+001  | 1.5923094+001 | 2.5634785+002 | 4.1758364+003 |
| 10 4, 6  | 1.6082044+001  | 1.5914756+001 | 2.5619179+002 | 4.1732244+003 |
| 10 5, 6  | 2.5053366+001  | 2.4946626+001 | 6.2467591+002 | 1.5698904+004 |
| 10 5, 5  | 2.5053417+001  | 2.4946423+001 | 6.2466982+002 | 1.5698743+004 |
| 10 6, 5  | 3.6037629+001  | 3.5962346+001 | 1.2950777+003 | 4.6695906+004 |
| 10 6, 4  | 3.6037630+001  | 3.5962343+001 | 1.2950776+003 | 4.6695902+004 |
| 10 7, 4  | 4.9026722+001  | 4.8973266+001 | 2.3996127+003 | 1.1762689+005 |
| 10 7, 3  | 4.9026722+001  | 4.8973266+001 | 2.3996127+003 | 1.1762689+005 |
| 10 8, 3  | 6.4018089+001  | 6.3981905+001 | 4.0944129+003 | 2.6204920+005 |
| 10 8, 2  | 6.4018089+001  | 6.3981905+001 | 4.0944129+003 | 2.6204920+005 |
| 10 9, 2  | 8.1010542+001  | 8.0989455+001 | 6.5596292+003 | 5.3130466+005 |
| 10 9, 1  | 8.1010542+001  | 8.0989455+001 | 6.5596292+003 | 5.3130466+005 |
| 10 10, 1 | 1.0000347+002  | 9.9996528+001 | 9.9994307+003 | 9.9992885+005 |
| 10 10, 0 | 1.0000347+002  | 9.9996528+001 | 9.9994307+003 | 9.9992885+005 |
| 11 0,11  | -1.1313959+000 | 7.6388074-001 | 3.3600029+000 | 1.8361197+001 |
| 11 1,11  | -9.6481840-001 | 1.2168406+000 | 3.2023588+000 | 2.1923310+001 |
| 11 1,10  | 2.2854406+000  | 1.4692605+000 | 5.7884190+000 | 4.7064115+001 |
| 11 2,10  | 3.7953933+000  | 4.1997495+000 | 2.0014233+001 | 1.3219423+002 |
| 11 2, 9  | 4.9208159+000  | 3.4535650+000 | 1.6986269+001 | 1.1943141+002 |

TABLE II.--EXPECTATION VALUES--CONTINUED

KAPPA = -0.900000 --CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 11 3, 9  | 9.1344086+000  | 8.9212663+000 | 8.3494420+001 | 8.3706943+002 |
| 11 3, 8  | 9.2686295+000  | 8.6693860+000 | 8.0924567+001 | 8.1235825+002 |
| 11 4, 8  | 1.6110688+001  | 1.5894233+001 | 2.5687161+002 | 4.2279156+003 |
| 11 4, 7  | 1.6116660+001  | 1.5876546+001 | 2.5653997+002 | 4.2223323+003 |
| 11 5, 7  | 2.5075217+001  | 2.4924808+001 | 6.2495773+002 | 1.5763441+004 |
| 11 5, 6  | 2.5075353+001  | 2.4924268+001 | 6.2494153+002 | 1.5763011+004 |
| 11 6, 6  | 3.6053759+001  | 3.5946193+001 | 1.2951309+003 | 4.6765018+004 |
| 11 6, 5  | 3.6053760+001  | 3.5946184+001 | 1.2951305+003 | 4.6765003+004 |
| 11 7, 5  | 4.9039459+001  | 4.8960520+001 | 2.3993916+003 | 1.1768454+005 |
| 11 7, 4  | 4.9039459+001  | 4.8960519+001 | 2.3993915+003 | 1.1768454+005 |
| 11 8, 4  | 6.4028652+001  | 6.3971336+001 | 4.0938709+003 | 2.6207078+005 |
| 11 8, 3  | 6.4028652+001  | 6.3971336+001 | 4.0938709+003 | 2.6207078+005 |
| 11 9, 3  | 8.1019629+001  | 8.0980364+001 | 6.5587212+003 | 5.3125579+005 |
| 11 9, 2  | 8.1019629+001  | 8.0980364+001 | 6.5587212+003 | 5.3125579+005 |
| 11 10, 2 | 1.0001151+002  | 9.9988489+001 | 9.9981123+003 | 9.9976409+005 |
| 11 10, 1 | 1.0001151+002  | 9.9988489+001 | 9.9981123+003 | 9.9976409+005 |
| 11 11, 1 | 1.2100380+002  | 1.2099620+002 | 1.4640233+004 | 1.7714432+006 |
| 11 11, 0 | 1.2100380+002  | 1.2099620+002 | 1.4640233+004 | 1.7714432+006 |
| 12 0,12  | -1.4931040+000 | 9.1961007-001 | 4.1777462+000 | 2.4819096+001 |
| 12 1,12  | -1.3704887+000 | 1.2829731+000 | 3.8922486+000 | 2.8945641+001 |
| 12 1,11  | 2.4109937+000  | 1.6821810+000 | 8.0265364+000 | 7.0270523+001 |
| 12 2,11  | 3.7090783+000  | 4.2814077+000 | 2.1668576+001 | 1.6081922+002 |
| 12 2,10  | 5.1903269+000  | 3.3967314+000 | 1.8148146+001 | 1.4717791+002 |
| 12 3,10  | 9.1692655+000  | 8.9181732+000 | 8.4951216+001 | 8.8933354+002 |
| 12 3, 9  | 9.3874554+000  | 8.5202691+000 | 8.0856120+001 | 8.4905078+002 |
| 12 4, 9  | 1.6150031+001  | 1.5859602+001 | 2.5766234+002 | 4.2996233+003 |
| 12 4, 8  | 1.6161881+001  | 1.5824695+001 | 2.5700620+002 | 4.2884906+003 |
| 12 5, 8  | 2.5102823+001  | 2.4897310+001 | 6.2544022+002 | 1.5855320+004 |
| 12 5, 7  | 2.5103150+001  | 2.4896006+001 | 6.2540105+002 | 1.5854279+004 |
| 12 6, 7  | 3.6073956+001  | 3.5925954+001 | 1.2953638+003 | 4.6870827+004 |
| 12 6, 6  | 3.6073961+001  | 3.5925927+001 | 1.2953627+003 | 4.6870781+004 |
| 12 7, 6  | 4.9055247+001  | 4.8944714+001 | 2.3993274+003 | 1.1778851+005 |
| 12 7, 5  | 4.9055247+001  | 4.8944714+001 | 2.3993274+003 | 1.1778851+005 |
| 12 8, 5  | 6.4041618+001  | 6.3958362+001 | 4.0934581+003 | 2.6214771+005 |
| 12 8, 4  | 6.4041618+001  | 6.3958362+001 | 4.0934581+003 | 2.6214771+005 |
| 12 9, 4  | 8.1030677+001  | 8.0969312+001 | 6.5579100+003 | 5.3126981+005 |
| 12 9, 3  | 8.1030677+001  | 8.0969312+001 | 6.5579100+003 | 5.3126981+005 |
| 12 10, 3 | 1.0002119+002  | 9.9978801+001 | 9.9968539+003 | 9.9966725+005 |
| 12 10, 2 | 1.0002119+002  | 9.9978801+001 | 9.9968539+003 | 9.9966725+005 |
| 12 11, 2 | 1.2101248+002  | 1.2098752+002 | 1.4638479+004 | 1.7711741+006 |
| 12 11, 1 | 1.2101248+002  | 1.2098752+002 | 1.4638479+004 | 1.7711741+006 |
| 12 12, 1 | 1.4400412+002  | 1.4399587+002 | 2.0734993+004 | 2.9857978+006 |
| 12 12, 0 | 1.4400412+002  | 1.4399587+002 | 2.0734993+004 | 2.9857978+006 |
| 13 0,13  | -1.9111534+000 | 1.0720977+000 | 5.0525791+000 | 3.2693205+001 |
| 13 1,13  | -1.8221285+000 | 1.3575432+000 | 4.6826689+000 | 3.7307081+001 |
| 13 1,12  | 2.5057970+000  | 1.9540428+000 | 1.0945234+001 | 1.0206435+002 |
| 13 2,12  | 3.5993801+000  | 4.3831206+000 | 2.3740896+001 | 1.9713142+002 |
| 13 2,11  | 5.4883604+000  | 3.3758999+000 | 1.9913614+001 | 1.8550605+002 |
| 13 3,11  | 9.2058631+000  | 8.9250795+000 | 8.6938690+001 | 9.5801999+002 |
| 13 3,10  | 9.5438699+000  | 8.3314943+000 | 8.0763829+001 | 8.9560447+002 |
| 13 4,10  | 1.6198141+001  | 1.5819569+001 | 2.5879768+002 | 4.3951494+003 |
| 13 4, 9  | 1.6220300+001  | 1.5754763+001 | 2.5757555+002 | 4.3742039+003 |
| 13 5, 9  | 2.5137145+001  | 2.4863262+001 | 6.2617105+002 | 1.5980144+004 |
| 13 5, 8  | 2.5137880+001  | 2.4860349+001 | 6.2608341+002 | 1.5977806+004 |
| 13 6, 8  | 3.6098903+001  | 3.5900936+001 | 1.2958212+003 | 4.7021189+004 |
| 13 6, 7  | 3.6098918+001  | 3.5900864+001 | 1.2958180+003 | 4.7021067+004 |
| 13 7, 7  | 4.9074582+001  | 4.8925348+001 | 2.3994660+003 | 1.1794947+005 |
| 13 7, 6  | 4.9074582+001  | 4.8925347+001 | 2.3994659+003 | 1.1794947+005 |
| 13 8, 6  | 6.4057362+001  | 6.3942605+001 | 4.0932208+003 | 2.6229386+005 |
| 13 8, 5  | 6.4057362+001  | 6.3942605+001 | 4.0932207+003 | 2.6229386+005 |
| 13 9, 5  | 8.1043981+001  | 8.0955999+001 | 6.5572421+003 | 5.3136422+005 |
| 13 9, 4  | 8.1043981+001  | 8.0955999+001 | 6.5572421+003 | 5.3136422+005 |
| 13 10, 4 | 1.0003276+002  | 9.9967225+001 | 9.9957022+003 | 9.9965989+005 |

TABLE II.—EXPECTATION VALUES—CONTINUED

KAPPA = -0.900000—CONTINUED

|          |                |               |               |               |
|----------|----------------|---------------|---------------|---------------|
| 13 10, 3 | 1.0003276+002  | 9.9967225+001 | 9.9957022+003 | 9.9965989+005 |
| 13 11, 3 | 1.2102277+002  | 1.2097722+002 | 1.4636791+004 | 1.7710003+006 |
| 13 11, 2 | 1.2102277+002  | 1.2097722+002 | 1.4636791+004 | 1.7710003+006 |
| 13 12, 2 | 1.4401345+002  | 1.4398655+002 | 2.0732717+004 | 2.9853768+006 |
| 13 12, 1 | 1.4401345+002  | 1.4398655+002 | 2.0732717+004 | 2.9853768+006 |
| 13 13, 1 | 1.6900445+002  | 1.6899555+002 | 2.8559708+004 | 4.8265255+006 |
| 13 13, 0 | 1.6900445+002  | 1.6899555+002 | 2.8559708+004 | 4.8265255+006 |
| 14 0,14  | -2.3848734+000 | 1.2193358+000 | 5.9833705+000 | 4.2130379+001 |
| 14 1,14  | -2.3209769+000 | 1.4396156+000 | 5.5695175+000 | 4.7111773+001 |
| 14 1,13  | 2.5605738+000  | 2.2851324+000 | 1.4597109+001 | 1.4425463+002 |
| 14 2,13  | 3.4630263+000  | 4.5064852+000 | 2.6272477+001 | 2.4219513+002 |
| 14 2,12  | 5.8084863+000  | 3.4014139+000 | 2.2457592+001 | 2.3787085+002 |
| 14 3,12  | 9.2422772+000  | 8.9459193+000 | 8.9566537+001 | 1.0462432+003 |
| 14 3,11  | 9.7438000+000  | 8.1065041+000 | 8.0722856+001 | 9.5403710+002 |
| 14 4,11  | 1.6255715+001  | 1.5775129+001 | 2.6037206+002 | 4.5192096+003 |
| 14 4,10  | 1.6295092+001  | 1.5661044+001 | 2.5821146+002 | 4.4817091+003 |
| 14 5,10  | 2.5179206+001  | 2.4821820+001 | 6.2720414+002 | 1.6144014+004 |
| 14 5, 9  | 2.5180748+001  | 2.4815722+001 | 6.2702042+002 | 1.6139088+004 |
| 14 6, 9  | 3.6129343+001  | 3.5870386+001 | 1.2965511+003 | 4.7224578+004 |
| 14 6, 8  | 3.6129379+001  | 3.5870207+001 | 1.2965432+003 | 4.7224272+004 |
| 14 7, 8  | 4.9098002+001  | 4.8901876+001 | 2.3998563+003 | 1.1817891+005 |
| 14 7, 7  | 4.9098003+001  | 4.8901872+001 | 2.3998561+003 | 1.1817890+005 |
| 14 8, 7  | 6.4076293+001  | 6.3923651+001 | 4.0932088+003 | 2.6252424+005 |
| 14 8, 6  | 6.4076293+001  | 6.3923651+001 | 4.0932088+003 | 2.6252424+005 |
| 14 9, 6  | 8.1059865+001  | 8.0940105+001 | 6.5567679+003 | 5.3155797+005 |
| 14 9, 5  | 8.1059865+001  | 8.0940105+001 | 6.5567679+003 | 5.3155797+005 |
| 14 10, 5 | 1.0004648+002  | 9.9953501+001 | 9.9947081+003 | 9.9976539+005 |
| 14 10, 4 | 1.0004648+002  | 9.9953501+001 | 9.9947081+003 | 9.9976539+005 |
| 14 11, 4 | 1.2103489+002  | 1.2096509+002 | 1.4635220+004 | 1.7709502+006 |
| 14 11, 3 | 1.2103489+002  | 1.2096509+002 | 1.4635220+004 | 1.7709502+006 |
| 14 12, 3 | 1.4402436+002  | 1.4397563+002 | 2.0730513+004 | 2.9850862+006 |
| 14 12, 2 | 1.4402436+002  | 1.4397563+002 | 2.0730513+004 | 2.9850862+006 |
| 14 13, 2 | 1.6901443+002  | 1.6898557+002 | 2.8556815+004 | 4.8258906+006 |
| 14 13, 1 | 1.6901443+002  | 1.6898557+002 | 2.8556815+004 | 4.8258906+006 |
| 14 14, 1 | 1.9600478+002  | 1.9599522+002 | 3.8414374+004 | 7.5291182+006 |
| 14 14, 0 | 1.9600478+002  | 1.9599522+002 | 3.8414374+004 | 7.5291182+006 |
| 15 0,15  | -2.9134572+000 | 1.3607115+000 | 6.9723782+000 | 5.3269091+001 |
| 15 1,15  | -2.8680399+000 | 1.5281520+000 | 6.5480656+000 | 5.8471745+001 |
| 15 1,14  | 2.5671174+000  | 2.6693874+000 | 1.8980786+001 | 1.9844218+002 |
| 15 2,14  | 3.2967910+000  | 4.6525562+000 | 2.9296858+001 | 2.9707020+002 |
| 15 2,13  | 6.1432367+000  | 3.4838169+000 | 2.5989945+001 | 3.0880184+002 |
| 15 3,13  | 9.2761420+000  | 8.9848156+000 | 9.2950122+001 | 1.1574074+003 |
| 15 3,12  | 9.9917679+000  | 7.8556589+000 | 8.0882197+001 | 1.0272947+003 |
| 15 4,12  | 1.6323201+001  | 1.5728024+001 | 2.6249886+002 | 4.6771049+003 |
| 15 4,11  | 1.6390129+001  | 1.5536467+001 | 2.5885172+002 | 4.6128161+003 |
| 15 5,11  | 2.5230068+001  | 2.4772224+001 | 6.2860134+002 | 1.6353570+004 |
| 15 5,10  | 2.5233130+001  | 2.4760154+001 | 6.2823708+002 | 1.6343741+004 |
| 15 6,10  | 3.6166076+001  | 3.5833491+001 | 1.2976050+003 | 4.7490073+004 |
| 15 6, 9  | 3.6166160+001  | 3.5833076+001 | 1.2975867+003 | 4.7489362+004 |
| 15 7, 9  | 4.9126091+001  | 4.8873702+001 | 2.4005509+003 | 1.1848916+005 |
| 15 7, 8  | 4.9126092+001  | 4.8873693+001 | 2.4005503+003 | 1.1848913+005 |
| 15 8, 8  | 6.4098853+001  | 6.3901055+001 | 4.0934757+003 | 2.6285496+005 |
| 15 8, 7  | 6.4098853+001  | 6.3901055+001 | 4.0934757+003 | 2.6285496+005 |
| 15 9, 7  | 8.1078673+001  | 8.0921280+001 | 6.5565416+003 | 5.3187145+005 |
| 15 9, 6  | 8.1078673+001  | 8.0921280+001 | 6.5565416+003 | 5.3187145+005 |
| 15 10, 6 | 1.0006262+002  | 9.9937349+001 | 9.9939258+003 | 1.0000088+006 |
| 15 10, 5 | 1.0006262+002  | 9.9937349+001 | 9.9939258+003 | 1.0000088+006 |
| 15 11, 5 | 1.2104907+002  | 1.2095091+002 | 1.4633821+004 | 1.7710540+006 |
| 15 11, 4 | 1.2104907+002  | 1.2095091+002 | 1.4633821+004 | 1.7710540+006 |
| 15 12, 4 | 1.4403705+002  | 1.4396293+002 | 2.0728436+004 | 2.9849621+006 |
| 15 12, 3 | 1.4403705+002  | 1.4396293+002 | 2.0728436+004 | 2.9849621+006 |
| 15 13, 3 | 1.6902596+002  | 1.6897403+002 | 2.8554001+004 | 4.8254298+006 |
| 15 13, 2 | 1.6902596+002  | 1.6897403+002 | 2.8554001+004 | 4.8254298+006 |
| 15 14, 2 | 1.9601540+002  | 1.9598459+002 | 3.8410762+004 | 7.5281899+006 |
| 15 14, 1 | 1.9601540+002  | 1.9598459+002 | 3.8410762+004 | 7.5281899+006 |
| 15 15, 1 | 2.2500511+002  | 2.2499489+002 | 5.0622987+004 | 1.1390026+007 |