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These tables are made available for the convenience of those interested in the analysis of two-nucleon transfer reactions. (There are separate tables for α,d and p,t reactions.)[1] They provide the "projected wave function" for the center of mass motion of a neutron-proton pair in a nucleus which occupy the single-particle states j and j' with spin J, when their relative motion corresponds to that characteristic of what it is in the helium nucleus.[2] In He^3 the relative angular momentum of neutron-proton pairs is dominantly S. Their spins may be coupled both to S=0 and 1. For brevity these will be referred to as the ^1S and ^3S correlations by which is also implied a spatial correlation dictated by the size of He^3.

Let $\psi_{jj'J}(1,2)$ refer to the part of the nuclear wave function referring to the two nucleons labelled 1 and 2,

$$\psi_{jj'J}(1,2) = \left[\phi_{n\ell j}(1)\, \phi_{n'\ell'j'}(2) \right]_J \qquad (1)$$

Here ϕ denotes a single-particle wave function, and the square bracket denotes vector coupling. If however isospin is considered a good quantum number, we should construct instead, the two linear combinations

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$$\psi_{jj'JT}(1,2) = \frac{1}{\sqrt{2(1+\Delta_{jj'})}} \left\{ \psi_{jj'J}(1,2) + (-)^T \psi_{jj'J}(2,1) \right\} \quad (2)$$

with T=0 or 1 and where $\Delta_{jj'} = \delta_{nn'}\ \delta_{\ell\ell'}\ \delta_{jj'}$. The projected wave function $\tilde{\phi}$ for a pure configuration such as this, outside a zero-spin core is

$$\tilde{\phi}_{jj'JST}(\underset{\sim}{R}) = \langle \phi(\underset{\sim}{r})\ \chi_S\ (\sigma_1\sigma_2) \mid \psi_{jj'JT}(1,2) \rangle \quad (3)$$

Here $\phi(\underset{\sim}{r})$ denotes the part of the He^3 wave function that refers to the relative motion (assumed to be pure S-state) of the neutron-proton pair, while χ_S denotes their spin-function. Because ϕ is symmetric, then χ_S must have the same symmetry as ψ_{JT}, which requires

$$S + T = \text{odd} \quad (4)$$

While most nuclear states are more complicated than the above description, their projected wave function can always be written as some linear combination of the elementary functions (3). The linear combination may involve configuration mixing amplitudes and fractional parentage coefficients, and its construction requires an intimate knowledge of all the conventions used in constructing the nuclear wave functions, as well as those used here.

For p,He^3 reactions we want both the ^1S and ^3S projection. When S=1, there may be several values of the orbital angular momentum transfer L, depending upon the parity and spin of ψ. These are, for given total angular momentum transfer J,

if $\ell + \ell' + J$ is even, then S=0 or 1 and L=J

or if $\ell + \ell' + J$ is odd, then S=1 and L=J ± 1 (5)

provided that

$$\underset{\sim}{\ell} + \underset{\sim}{\ell'} + \underset{\sim}{L} = 0$$

A configuration $(n\ell j)^2_J$ in which the particles occupy identical states is a special case since the corresponding space-spin wave function is automatically symmetric (T=0) or antisymmetric (T=1) according as J is odd or even. However since all these rules are incorporated in the tables, they can be used without specific reference to the rules.

In general we may write the projected function (3) as

$$\tilde{\phi}_{jj'JST}(\underset{\sim}{R}) = \sum_L \tilde{u}_{jj'LSJT}(R)\, Y_L(\hat{\underset{\sim}{R}}) \tag{6}$$

with the sum being over one or two terms as dictated by (5). The radial parts $\tilde{u}(R)$ of (6) are tabulated in the form of expansion coefficients referred to a harmonic oscillator basis. These are the coefficients G_N in[2]

$$\tilde{u}_{jj'LSJT}(R) = \sum_N G_{NLSJT}(jj')\, u_{NL}(2\nu R^2) \tag{7}$$

The value used for the oscillator parameter $\nu(=m\omega/\hbar)$ is listed in the tables and three values, corresponding to different masses, are used for each configuration. The function u_{NL} is an oscillator function defined in ref. 2, Eq. (A8).

The normalization of $\tilde{u}$ is not unity, since it is a projected function. In fact, its normalization (squared),

$$P = \sum_{N} G^{2}_{NLSJ} \tag{8}$$

tells the probability of finding the favored correlation between the pair when their center of mass motion is characterized by the quantum numbers LSJ. The radial distribution of this probability is given by,

$$P(R) = [R\tilde{u}(R)]^2 \tag{9}$$

Because these reactions are concentrated in the surface region, it will be recognized that even though two states may have about the same probability P of overlapping with the favored correlation, the one for which this probability is concentrated in the surface will be more strongly populated in the reaction. This is the reason why a spectroscopic factor, which in single-transfer reactions is the probability for the appearance of a certain single-particle state (having a specific radial form) has less value in discussing two-nucleon transfer reactions. Two states built up from the same configurations, having therefore orthogonal mixtures, may present different radial profiles as far as the two-nuclear transfer reaction is concerned.

In case isospin is not considered a good quantum number, the projection

$$\tilde{\phi}_{jj'JS}(\underset{\sim}{R}) = \langle \phi(\underset{\sim}{r})\ \chi_S\ (\sigma_1\sigma_2) \mid \psi_{jj'J}(1,2) \rangle \tag{10}$$

is required instead of (3). The multipole expansion of $\tilde{\phi}$ goes through as before, but the amplitudes in the expansion of $\tilde{u}$ should be multiplied by

$$\left(\frac{1 + \Delta_{jj'}}{2} \right)^{1/2} \qquad (11)$$

That is to say, entries in the table of G's corresponding to the two particles occupying different single particle states, should be divided by $\sqrt{2}$.

Example 1. Suppose it is postulated that a transfer reaction near mass 40 to a 4^+ state involves the pure configuration $\left(f^2_{7/2}\right)_{J=4}$, with a passive zero-spin core. Since $1f_{7/2}$ belongs to the 3'rd oscillator shell we look for the NN1 = NN2 = 3 section of the tables. From known selectors rules or the tables, we find that S=0 alone is allowed, whence according to Eq. (4), such a configuration has T=1. The projected wave function $\tilde{u}_{LSJ}$ is

$$\tilde{u}_{404}(R) = 0.0189\, u_{14}(2\nu R^2) + 0.1169\, u_{24}(2\nu R^2)$$

with $\nu = 0.292\ F^{-2}$.

This could be used in a DWBA calculation as the analogue of the single particle wave function in (d,p) reactions. That is to say

$$\frac{d\sigma}{d\Omega} \propto \sum_M \left| \int \psi^{(-)}\, \tilde{u}_{404}\, Y^M_4\, \psi^{(+)}\, d\vec{R} \right|^2$$

Conventions

1) The radial quantum number N has values $N \geq 1$ and is related to the oscillator quantum number according to

$$\mathcal{N} = 2(N-1) + L$$

The oscillator functions u_{NL} all have positive slope at the origin.

2) Spherical harmonics have Condon-Shortly phases.

3) The order of spin-orbit coupling is $\underset{\sim}{\ell} + \underset{\sim}{s} = \underset{\sim}{j}$ not $\underset{\sim}{s} + \underset{\sim}{\ell} = \underset{\sim}{j}$.

The tables may be converted to the latter convention by multiplying all entries by the appropriate phase factor $(-)^{\sigma}$ where $\sigma = \ell_1 + j_1 + \ell_2 + j_2 + 1$.

4) If the order $j_2 j_1$ is desired while the table lists $j_1 j_2$, multiply the corresponding entries by $(-)^{\rho}$ where $\rho = j_1 + j_2 - J + 1$.

Example 2. As an extension of example 1 suppose the wave function is

$$\psi_{JT} = \alpha \left(f_{7/2}^2 \right)_{J=4} + \beta \left(f_{7/2}\, {}^2p_{1/2} \right)_{J=4}$$

Since T=1, only the S=0 part of the table is relevant and we have for G_{NLSJ}

$$G_{1404} = 0.0189\ \alpha + 0.0044\ \beta$$

$$G_{2404} = 0.1169\ \alpha + 0.3016\ \beta$$

in place of the amplitudes quoted in example 1. That is

$$\tilde{u}_{404}(R) = G_{1404}\, u_{14}\, (2\nu R^2) + G_{2404}\, u_{24}\, (2\nu R^2)$$

Example 3. Suppose the state of example 2 is assumed to have no particular symmetry. This does not effect the first configuration since it automatically has T=1, but the second configuration is effected. According to Eq. (10) and (11) we have for G_{NLSJ}

$$G_{1404} = 0.0189\ \alpha + 0.0044\ \beta/\sqrt{2}$$

$$G_{2404} = 0.1169\ \alpha + 0.3016\ \beta/\sqrt{2}$$

But the second configuration can now be reached with spin S=1 also:

$$G_{1414} = 0.0050\ \beta/\sqrt{2}$$

$$G_{2414} = 0.3372\ \beta/\sqrt{2}$$

The projected wave functions corresponding to the transfer of the pair in these two center-of-mass states are therefore

$$\tilde{u}_{404} = G_{1404}\ u_{14}(\rho) + G_{2404}\ u_{24}(\rho)$$

$$\tilde{u}_{414} = G_{1414}\ u_{14}(\rho) + G_{2414}\ u_{24}(\rho)$$

where $\rho = 2\nu R^2$.

Example 4. Suppose that the postulated wave functions for a 3^+ state near mass 40 is $\left(f^2_{7/2}\right)_{J=3}$. From known selection rules, or the tables we find S=1 whence according to Eq. (4) T=0. Two values of L are allowed, 2 and 4. The corresponding projected wave functions $\tilde{u}_{LSJ}$ are

$$\tilde{u}_{213}(R) = 0.0013\ u_{12}(\rho) + 0.0203\ u_{22}(\rho) + 0.0977\ u_{32}(\rho)$$

$$\tilde{u}_{413}(R) = -0.0083\ u_{14}(\rho) - 0.0510\ u_{24}(\rho)$$

where $\rho = 2\nu R^2$, and $\nu = 0.292\ F^{-2}$.

Example 5. The same function as in example 2 would appear, if written in the convention in which the spin-orbit coupling is $\underset{\sim}{s} + \underset{\sim}{\ell} = \underset{\sim}{j}$ as

$$\psi_{JT} = \alpha \left(\bar{f}^2_{7/2} \right)_{J=4} - \beta \left(\bar{f}_{7/2}\, 2\bar{p}_{1/2} \right)_{J=4}, \quad T=1$$

where bars denote use of this latter convention. Application of the rules on conventions leads to the same G's as before.

Arrangement of the Tables

Configurations $(n_1 \ell_1 j_1)(n_2 \ell_2 j_2)$ are considered, whose oscillator quantum numbers ($\mathcal{N} = 2(n-1) + \ell$) differ at most by one. The table starts with both particles in the first oscillator shell $(\mathcal{N}_1, \mathcal{N}_2) = (1,1)$ and progresses through (1,2), (2,2), (2,3), etc. In the tables these quantum numbers are denoted by NN1 and NN2. For each of these pairs of quantum numbers, all possible paris of single-particle quantum numbers are constructed together with all their possible spin, orbital and total angular momentum S, L and J, and their corresponding structure amplitudes are tabulated. Each pair of oscillator quanta $(\mathcal{N}_1 \mathcal{N}_2)$ is covered by three different choices of mass. Since the amplitudes are smoothly varying functions of mass, intermediate values can be easily interpolated if that is desired. The oscillator constant is chosen as

$$\nu = A^{-1/3}$$

corresponding approximately to $\hbar\omega = 41\, A^{-1/3}$ MeV.

The size parameter of the He^3 is taken as $0.206\ F^{-2}$ (see Sec. II of Ref. 2).

These brief notes to the tables are not expected to be self-contained, and probably the reader needs at least a qualitative understanding of Ref. 2.

REFERENCES

1. Tables for the three reactions and their inverse are issued as UCRL reports as follows:

p,t	- UCRL-18268
p,He^3	- UCRL-18269
α,d	- UCRL-18270

2. N. K. Glendenning, Phys. Rev. 137, B102 (1965).

STRUCTURE TABLE

Structure Amplitudes for (p,He^3) Reactions

η = .2060 A = 3.0000

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

NN1= 1 NN2= 1

N L J	N L J	S	J	L	G(1)	G(2)	G(3)	G(4)	G(5)	G(6)	G(7)
		MASS= 4 NU= .630									
1P 3/2	1P 3/2	0									
			0	0	.2585	.4975					
			2	2	.3518						
		1									
			1	0	.1927	.3708					
			1	2	-.1658						
			3	2	.6093						
1P 3/2	1P 1/2	0									
			2	2	.4974						
		1									
			1	0	-.2437	-.4690					
			1	2	-.2622						
			2	2	.6092						
1P 1/2	1P 1/2	0									
			0	0	.1828	.3518					
		1									
			1	0	-.0609	-.1173					
			1	2	.5244						
		MASS= 10 NU= .464									
1P 3/2	1P 3/2	0									
			0	0	.1929	.5401					
			2	2	.3819						
		1									
			1	0	.1437	.4026					
			1	2	-.1800						
			3	2	.6615						
1P 3/2	1P 1/2	0									
			2	2	.5401						
		1									
			1	0	-.1818	-.5092					
			1	2	-.2846						
			2	2	.6614						
1P 1/2	1P 1/2	0									
			0	0	.1364	.3819					
		1									
			1	0	-.0455	-.1273					
			1	2	.5694						
		MASS= 16 NU= .397									
1P 3/2	1P 3/2	0									
			0	0	.1488	.5566					
			2	2	.3936						
		1									
			1	0	.1109	.4149					
			1	2	-.1855						
			3	2	.6817						
1P 3/2	1P 1/2	0									

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				2	2	.5565	
			1				
				1	0	-.1403	-.5247
				1	2	-.2933	
				2	2	.6816	
1P	1/2	1P	1/2	0			
				0	0	.1052	.3936
				1			
				1	0	-.0351	-.1312
				1	2	.5867	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

NN1= 1 NN2= 2

N L J	N L J	S	J	L	G(1)	G(2)	G(3)	G(4)	G(5)	G(6)	G(7)
		MASS= 16 NU= .397									
1P 3/2	1D 5/2	0									
			1	1	.1488	.4311					
			3	3	.4311						
		1									
			1	1	-.1052	-.3048					
			2	1	.1245	.3607					
			2	3	-.1574						
			3	3	-.1244						
			4	3	.8347						
1P 3/2	1D 3/2	0									
			1	1	.0496	.1437					
			3	3	.5279						
		1									
			0	1	-.1921	-.5565					
			1	1	.1403	.4064					
			2	1	-.0543	-.1574					
			2	3	-.3607						
			3	3	.6096						
1P 3/2	2S 1/2	0									
			1	1	-.0351	.5080					
		1									
			1	1	-.0248	.3592					
			2	1	-.0430	.6222					
1P 1/2	1D 5/2	0									
			3	3	-.4819						
		1									
			2	1	.1331	.3856					
			2	3	.1472						
			3	3	.5565						
1P 1/2	1D 3/2	0									
			1	1	.1109	.3213					
		1									
			1	1	.0784	.2272					
			2	1	-.0272	-.0787					
			2	3	.7213						
1P 1/2	2S 1/2	0									
			1	1	.0248	-.3592					
		1									
			0	1	-.0430	.6222					
			1	1	-.0351	.5080					
		MASS= 28 NU= .329									
1P 3/2	1D 5/2	0									
			1	1	.0893	.4416					
			3	3	.4416						
		1									
			1	1	-.0632	-.3123					
			2	1	.0747	.3695					
			2	3	-.1613						
			3	3	-.1275						
			4	3	.8552						

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

1P 3/2	1D 3/2	0			
			1	1	.0298 .1472
			3	3	.5409
		1			
			0	1	-.1153 -.5702
			1	1	.0842 .4164
			2	1	-.0326 -.1613
			2	3	-.3695
			3	3	.6246
1P 3/2	2S 1/2	0			
			1	1	-.0211 .5205
		1			
			1	1	-.0149 .3680
			2	1	-.0258 .6375
1P 1/2	1D 5/2	0			
			3	3	-.4938
		1			
			2	1	.0799 .3950
			2	3	.1509
			3	3	.5702
1P 1/2	1D 3/2	0			
			1	1	.0666 .3292
		1			
			1	1	.0471 .2328
			2	1	-.0163 -.0806
			2	3	.7390
1P 1/2	2S 1/2	0			
			1	1	.0149 -.3680
		1			
			0	1	-.0258 .6375
			1	1	-.0211 .5205

MASS= 40 NU= .292

1P 3/2	1D 5/2	0			
			1	1	.0487 .4455
			3	3	.4455
		1			
			1	1	-.0344 -.3150
			2	1	.0407 .3728
			2	3	-.1627
			3	3	-.1286
			4	3	.8628
1P 3/2	1D 3/2	0			
			1	1	.0162 .1485
			3	3	.5457
		1			
			0	1	-.0628 -.5752
			1	1	.0459 .4201
			2	1	-.0178 -.1627
			2	3	-.3728
			3	3	.6301
1P 3/2	2S 1/2	0			
			1	1	-.0115 .5251
		1			
			1	1	-.0081 .3713
			2	1	-.0140 .6431
1P 1/2	1D 5/2	0			
			3	3	-.4981
		1			

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				2	1	.0435	.3985
				2	3	.1522	
				3	3	.5752	
1P	1/2	1D	3/2	0			
				1	1	.0363	.3321
				1			
				1	1	.0256	.2348
				2	1	-.0089	-.0813
				2	3	.7455	
1P	1/2	2S	1/2	0			
				1	1	.0081	-.3713
				1			
				0	1	-.0140	.6431
				1	1	-.0115	.5251

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

NN1= 2 NN2= 2

N L J	N L J	S	J	L	G(1)	G(2)	G(3)	G(4)	G(5)	G(6)	G(7)
		MASS= 16 NU= .397									
1D 5/2	1D 5/2	0									
			0	0	.0199	.1488	.3049				
			2	2	.0788	.1928					
			4	4	.2640						
		1									
			1	0	.0136	.1017	.2083				
			1	2	-.0455	-.1113					
			3	2	.0893	.2186					
			3	4	-.0893						
			5	4	.5903						
1D 5/2	1D 3/2	0									
			2	2	.0557	.1363					
			4	4	.5279						
		1									
			1	0	-.0205	-.1537	-.3148				
			1	2	-.0601	-.1472					
			2	2	.1137	.2782					
			3	2	-.0687	-.1683					
			3	4	-.2318						
			4	4	.5903						
1D 5/2	2S 1/2	0									
			2	2	.0235	.4032					
		1									
			2	2	.0192	.3292					
			3	2	.0304	.5206					
1D 3/2	1D 3/2	0									
			0	0	.0162	.1215	.2489				
			2	2	.0601	.1473					
		1									
			1	0	-.0073	-.0543	-.1113				
			1	2	.0851	.2083					
			3	2	-.0149	-.0364					
			3	4	.5355						
1D 3/2	2S 1/2	0									
			2	2	-.0192	-.3292					
		1									
			1	2	.0304	.5206					
			2	2	.0235	.4032					
2S 1/2	2S 1/2	0									
			0	0	.0287	-.0430	.4400				
		1									
			1	0	.0287	-.0430	.4400				
		MASS= 28 NU= .329									
1D 5/2	1D 5/2	0									
			0	0	.0070	.0893	.3123				
			2	2	.0473	.1975					
			4	4	.2705						
		1									
			1	0	.0048	.0610	.2134				
			1	2	-.0273	-.1140					

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			3	2	.0536	.2240	
			3	4	-.0914		
			5	4	.6048		
1D 5/2	1D 3/2	0					
			2	2	.0334	.1397	
			4	4	.5409		
		1					
			1	0	-.0072	-.0923	-.3225
			1	2	-.0361	-.1509	
			2	2	.0682	.2851	
			3	2	-.0413	-.1724	
			3	4	-.2375		
			4	4	.6047		
1D 5/2	2S 1/2	0					
			2	2	.0141	.4131	
		1					
			2	2	.0115	.3373	
			3	2	.0182	.5333	
1D 3/2	1D 3/2	0					
			0	0	.0057	.0730	.2550
			2	2	.0361	.1509	
		1					
			1	0	-.0026	-.0326	-.1140
			1	2	.0511	.2134	
			3	2	-.0089	-.0373	
			3	4	.5487		
1D 3/2	2S 1/2	0					
			2	2	-.0115	-.3373	
		1					
			1	2	.0182	.5333	
			2	2	.0141	.4131	
2S 1/2	2S 1/2	0					
			0	0	.0101	-.0258	.4508
		1					
			1	0	.0101	-.0258	.4508

MASS= 40 NU= .292

1D 5/2	1D 5/2	0					
			0	0	.0021	.0487	.3151
			2	2	.0258	.1993	
			4	4	.2729		
		1					
			1	0	.0014	.0333	.2153
			1	2	-.0149	-.1151	
			3	2	.0292	.2260	
			3	4	-.0923		
			5	4	.6102		
1D 5/2	1D 3/2	0					
			2	2	.0182	.1409	
			4	4	.5457		
		1					
			1	0	-.0021	-.0503	-.3254
			1	2	-.0197	-.1522	
			2	2	.0372	.2876	
			3	2	-.0225	-.1739	
			3	4	-.2396		
			4	4	.6101		
1D 5/2	2S 1/2	0					
			2	2	.0077	.4168	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			1				
				2	2	.0063	.3403
				3	2	.0099	.5380
1D	3/2	1D	3/2	0			
				0	0	.0017	.0397 .2573
				2	2	.0197	.1522
			1				
				1	0	-.0008	-.0178 -.1151
				1	2	.0278	.2153
				3	2	-.0049	-.0377
				3	4	.5535	
1D	3/2	2S	1/2	0			
				2	2	-.0063	-.3403
			1				
				1	2	.0099	.5380
				2	2	.0077	.4168
2S	1/2	2S	1/2	0			
				0	0	.0030	-.0141 .4548
			1				
				1	0	.0030	-.0141 .4548

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

NN1= 2 NN2= 3

N L J	N L J	S	J	L	G(1)	G(2)	G(3)	G(4)	G(5)	G(6)	G(7)
		MASS= 40 NU= .292									
1D 5/2	1F 7/2	0									
			1	1	.0024	.0435	.2382				
			3	3	.0302	.2062					
			5	5	.3261						
		1									
			1	1	-.0017	-.0308	-.1684				
			2	1	.0017	.0320	.1750				
			2	3	-.0140	-.0953					
			3	3	-.0087	-.0595					
			4	3	.0374	.2549					
			4	5	-.0972						
			5	5	-.0595						
			6	5	.7876						
1D 5/2	1F 5/2	0									
			1	1	.0005	.0097	.0533				
			3	3	.0191	.1304					
			5	5	.5156						
		1									
			0	1	-.0031	-.0576	-.3150				
			1	1	.0023	.0413	.2259				
			2	1	-.0010	-.0174	-.0953				
			2	3	-.0256	-.1750					
			3	3	.0331	.2259					
			4	3	-.0142	-.0972					
			4	5	-.2549						
			5	5	.5648						
1D 5/2	2P 3/2	0									
			1	1	-.0016	.0195	.3728				
			3	3	-.0049	.2989					
		1									
			1	1	-.0011	.0138	.2636				
			2	1	-.0013	.0163	.3119				
			2	3	.0018	-.1091					
			3	3	-.0014	.0863					
			4	3	-.0094	.5788					
1D 5/2	2P 1/2	0									
			3	3	-.0054	.3342					
		1									
			2	1	.0014	-.0174	-.3334				
			2	3	.0017	-.1021					
			3	3	-.0063	.3859					
1D 3/2	1F 7/2	0									
			3	3	-.0175	-.1191					
			5	5	-.4981						
		1									
			2	1	.0023	.0426	.2333				
			2	3	.0105	.0714					
			3	3	.0302	.2062					
			4	3	.0225	.1537					
			4	5	.1612						
			5	5	.5457						
1D 3/2	1F 5/2	0									
			1	1	.0020	.0364	.1993				
			3	3	.0234	.1598					

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

		1				
			1	1	.0014	.0258	.1409
			2	1	-.0007	-.0131	-.0714
			2	3	.0342	.2333	
			3	3	.0068	.0461	
			4	3	-.0050	-.0344	
			4	5	.7210		
1D	3/2	2P 3/2	0				
			1	1	.0005	-.0065	-.1243
			3	3	.0060	-.3661	
		1				
			0	1	-.0021	.0251	.4812
			1	1	-.0015	.0184	.3515
			2	1	-.0006	.0071	.1361
			2	3	-.0041	.2501	
			3	3	-.0069	.4227	
1D	3/2	2P 1/2	0				
			1	1	-.0012	.0145	.2778
		1				
			1	1	.0008	-.0103	-.1965
			2	1	.0003	-.0036	-.0681
			2	3	-.0081	.5001	
2S	1/2	1F 7/2	0				
			3	3	.0159	.3261	
		1				
			3	3	-.0138	-.2824	
			4	3	.0211	.4314	
2S	1/2	1F 5/2	0				
			3	3	.0138	.2824	
		1				
			2	3	-.0211	-.4314	
			3	3	.0159	.3261	
2S	1/2	2P 3/2	0				
			1	1	.0019	-.0115	.4393
		1				
			1	1	-.0013	.0081	-.3106
			2	1	.0023	-.0140	.5380
2S	1/2	2P 1/2	0				
			1	1	.0013	-.0081	.3106
		1				
			0	1	-.0023	.0140	-.5380
			1	1	.0019	-.0115	.4393

MASS= 60 NU= .255

1D	5/2	1F 7/2	0				
			1	1	.0000	.0010	.2390
			3	3	.0007	.2070	
			5	5	.3273		
		1				
			1	1	-.0000	-.0007	-.1690
			2	1	.0000	.0008	.1756
			2	3	-.0003	-.0956	
			3	3	-.0002	-.0598	
			4	3	.0009	.2558	
			4	5	-.0976		
			5	5	-.0598		
			6	5	.7904		
1D	5/2	1F 5/2	0				
			1	1	.0000	.0002	.0534

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			3	3	.0004	.1309
			5	5	.5175	
		1				
			0	1	-.0000	-.0014	-.3162
			1	1	.0000	.0010	.2267
			2	1	-.0000	-.0004	-.0956
			2	3	-.0006	-.1756	
			3	3	.0008	.2267	
			4	3	-.0003	-.0976	
			4	5	-.2558		
			5	5	.5669		
1D	5/2	2P 3/2	0			
			1	1	-.0000	.0005	.3741
			3	3	-.0001	.3000	
		1				
			1	1	-.0000	.0003	.2645
			2	1	-.0000	.0004	.3130
			2	3	.0000	-.1095	
			3	3	-.0000	.0866	
			4	3	-.0002	.5809	
1D	5/2	2P 1/2	0			
			3	3	-.0001	.3354	
		1				
			2	1	.0000	-.0004	-.3346
			2	3	.0000	-.1025	
			3	3	-.0001	.3872	
1D	3/2	1F 7/2	0			
			3	3	-.0004	-.1195	
			5	5	-.4999		
		1				
			2	1	.0000	.0010	.2342
			2	3	.0002	.0717	
			3	3	.0007	.2070	
			4	3	.0005	.1543	
			4	5	.1618		
			5	5	.5476		
1D	3/2	1F 5/2	0			
			1	1	.0000	.0009	.2000
			3	3	.0005	.1603	
		1				
			1	1	.0000	.0006	.1414
			2	1	-.0000	-.0003	-.0717
			2	3	.0008	.2342	
			3	3	.0002	.0463	
			4	3	-.0001	-.0345	
			4	5	.7236		
1D	3/2	2P 3/2	0			
			1	1	.0000	-.0002	-.1247
			3	3	.0001	-.3674	
		1				
			0	1	-.0000	.0006	.4830
			1	1	-.0000	.0004	.3527
			2	1	-.0000	.0002	.1366
			2	3	-.0001	.2510	
			3	3	-.0002	.4242	
1D	3/2	2P 1/2	0			
			1	1	-.0000	.0003	.2788
		1				
			1	1	.0000	-.0002	-.1972
			2	1	.0000	-.0001	-.0683
			2	3	-.0002	.5019	
2S	1/2	1F 7/2	0			

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				3	3	.0004	.3273
			1				
				3	3	-.0003	-.2834
				4	3	.0005	.4329
2S	1/2	1F	5/2	0			
				3	3	.0003	.2834
			1				
				2	3	-.0005	-.4329
				3	3	.0004	.3273
2S	1/2	2P	3/2	0			
				1	1	.0000	-.0003 .4409
			1				
				1	1	-.0000	.0002 -.3118
				2	1	.0000	-.0003 .5400
2S	1/2	2P	1/2	0			
				1	1	.0000	-.0002 .3118
			1				
				0	1	-.0000	.0003 -.5400
				1	1	.0000	-.0003 .4409

MASS= 80 NU= .232

1D	5/2	1F	7/2	0			
				1	1	.0011	-.0292 .2386
				3	3	-.0203	.2067
				5	5	.3268	
			1				
				1	1	-.0008	.0207 -.1687
				2	1	.0008	-.0215 .1754
				2	3	.0094	-.0955
				3	3	.0059	-.0597
				4	3	-.0251	.2554
				4	5	-.0974	
				5	5	-.0597	
				6	5	.7892	
1D	5/2	1F	5/2	0			
				1	1	.0002	-.0065 .0534
				3	3	-.0128	.1307
				5	5	.5166	
			1				
				0	1	-.0014	.0387 -.3157
				1	1	.0010	-.0277 .2264
				2	1	-.0004	.0117 -.0955
				2	3	.0172	-.1754
				3	3	-.0222	.2264
				4	3	.0096	-.0974
				4	5	-.2554	
				5	5	.5659	
1D	5/2	2P	3/2	0			
				1	1	-.0007	-.0131 .3735
				3	3	.0033	.2995
			1				
				1	1	-.0005	-.0092 .2641
				2	1	-.0006	-.0109 .3125
				2	3	-.0012	-.1094
				3	3	.0009	.0865
				4	3	.0063	.5799
1D	5/2	2P	1/2	0			
				3	3	.0037	.3348
			1				

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				2	1	.0006	.0117	-.3341
				2	3	-.0011	-.1023	
				3	3	.0042	.3866	
1D	3/2	1F	7/2	0				
				3	3	.0117	-.1193	
				5	5	-.4991		
				1				
				2	1	.0010	-.0286	.2338
				2	3	-.0070	.0716	
				3	3	-.0203	.2067	
				4	3	-.0151	.1540	
				4	5	.1616		
				5	5	.5468		
1D	3/2	1F	5/2	0				
				1	1	.0009	-.0245	.1996
				3	3	-.0157	.1601	
				1				
				1	1	.0006	-.0173	.1412
				2	1	-.0003	.0088	-.0716
				2	3	-.0230	.2338	
				3	3	-.0045	.0462	
				4	3	.0034	-.0344	
				4	5	.7225		
1D	3/2	2P	3/2	0				
				1	1	.0002	.0044	-.1245
				3	3	-.0040	-.3668	
				1				
				0	1	-.0009	-.0169	.4822
				1	1	-.0007	-.0123	.3521
				2	1	-.0003	-.0048	.1364
				2	3	.0027	.2506	
				3	3	.0046	.4235	
1D	3/2	2P	1/2	0				
				1	1	-.0005	-.0097	.2784
				1				
				1	1	.0004	.0069	-.1969
				2	1	.0001	.0024	-.0682
				2	3	.0055	.5011	
2S	1/2	1F	7/2	0				
				3	3	-.0107	.3268	
				1				
				3	3	.0093	-.2830	
				4	3	-.0142	.4323	
2S	1/2	1F	5/2	0				
				3	3	-.0093	.2830	
				1				
				2	3	.0142	-.4323	
				3	3	-.0107	.3268	
2S	1/2	2P	3/2	0				
				1	1	.0008	.0077	.4402
				1				
				1	1	-.0006	-.0054	-.3113
				2	1	.0010	.0094	.5391
2S	1/2	2P	1/2	0				
				1	1	.0006	.0054	.3113
				1				
				0	1	-.0010	-.0094	-.5391
				1	1	.0008	.0077	.4402

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

NN1= 3 NN2= 3

N L J	N L J	S	J	L	G(1)	G(2)	G(3)	G(4)	G(5)	G(6)	G(7)
			MASS= 40		NU= .292						
1F 7/2	1F 7/2	0									
			0	0	.0001	.0029	.0377	.1684			
			2	2	.0013	.0209	.1007				
			4	4	.0189	.1169					
			6	6	.2105						
		1									
			1	0	.0001	.0019	.0247	.1103			
			1	2	-.0009	-.0132	-.0637				
			3	2	.0013	.0203	.0977				
			3	4	-.0083	-.0510					
			5	4	.0266	.1641					
			5	6	-.0588						
			7	6	.5570						
1F 7/2	1F 5/2	0									
			2	2	.0007	.0102	.0493				
			4	4	.0200	.1233					
			6	6	.5156						
		1									
			1	0	-.0001	-.0031	-.0403	-.1800			
			1	2	-.0010	-.0162	-.0780				
			2	2	.0019	.0292	.1409				
			3	2	-.0013	-.0199	-.0962				
			3	4	-.0168	-.1036					
			4	4	.0313	.1929					
			5	4	-.0162	-.0997					
			5	6	-.1934						
			6	6	.5569						
1F 7/2	2P 3/2	0									
			2	2	-.0004	.0255	.2767				
			4	4	.0038	.2549					
		1									
			2	2	-.0003	.0208	.2259				
			3	2	-.0003	.0215	.2339				
			3	4	-.0011	-.0746					
			4	4	.0017	.1140					
			5	4	.0077	.5224					
1F 7/2	2P 1/2	0									
			4	4	.0044	.3016					
		1									
			3	2	.0004	-.0249	-.2700				
			3	4	-.0010	-.0646					
			4	4	.0050	.3372					
1F 5/2	1F 5/2	0									
			0	0	.0001	.0025	.0327	.1459			
			2	2	.0011	.0177	.0854				
			4	4	.0148	.0914					
		1									
			1	0	-.0000	-.0012	-.0159	-.0712			
			1	2	.0013	.0204	.0986				
			3	2	-.0004	-.0067	-.0323				
			3	4	.0250	.1545					
			5	4	-.0030	-.0186					
			5	6	.5190						
1F 5/2	2P 3/2	0									

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			2	2	.0002	-.0104	-.1130
			4	4	-.0050	-.3420	
		1					
			1	2	-.0005	.0337	.3661
			2	2	-.0003	.0212	.2306
			3	2	-.0001	.0064	.0697
			3	4	.0037	.2503	
			4	4	.0056	.3824	
1F 5/2	2P 1/2	0					
			2	2	-.0003	.0195	.2113
		1					
			2	2	.0003	-.0159	-.1726
			3	2	.0001	-.0036	-.0390
			3	4	.0066	.4478	
2P 3/2	2P 3/2	0					
			0	0	.0002	.0003	.0044	.4168
			2	2	.0011	-.0053	.2283
		1					
			1	0	.0002	.0003	.0033	.3107
			1	2	-.0005	.0025	-.1076
			3	2	.0019	-.0091	.3954
2P 3/2	2P 1/2	0					
			2	2	.0016	-.0074	.3228
		1					
			1	0	-.0002	-.0003	-.0042	-.3929
			1	2	-.0008	.0039	-.1701
			2	2	.0019	-.0091	.3954
2P 1/2	2P 1/2	0					
			0	0	.0001	.0002	.0031	.2947
		1					
			1	0	-.0000	-.0001	-.0010	-.0982
			1	2	.0017	-.0078	.3403	

MASS= 60 NU= .255

1F 7/2	1F 7/2	0					
			0	0	.0000	.0000	.0009	.1690
			2	2	.0000	.0005	.1010
			4	4	.0004	.1174	
			6	6	.2113		
		1					
			1	0	.0000	.0000	.0006	.1107
			1	2	-.0000	-.0003	-.0639
			3	2	.0000	.0005	.0981
			3	4	-.0002	-.0512	
			5	4	.0006	.1647	
			5	6	-.0590		
			7	6	.5590		
1F 7/2	1F 5/2	0					
			2	2	.0000	.0002	.0495	
			4	4	.0005	.1237	
			6	6	.5175		
		1					
			1	0	-.0000	-.0000	-.0009	-.1807
			1	2	-.0000	-.0004	-.0782
			2	2	.0000	.0007	.1414
			3	2	-.0000	-.0005	-.0966
			3	4	-.0004	-.1040	
			4	4	.0007	.1936	
			5	4	-.0004	-.1001	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			5	6	-.1941		
			6	6	.5589		
1F 7/2	2P 3/2	0					
			2	2	-.0000	.0006	.2777
			4	4	.0001	.2558	
		1					
			2	2	-.0000	.0005	.2267
			3	2	-.0000	.0005	.2347
			3	4	-.0000	-.0749	
			4	4	.0000	.1144	
			5	4	.0002	.5243	
1F 7/2	2P 1/2	0					
			4	4	.0001	.3027	
		1					
			3	2	.0000	-.0006	-.2710
			3	4	-.0000	-.0649	
			4	4	.0001	.3384	
1F 5/2	1F 5/2	0					
			0	0	.0000	.0000	.0008 .1464
			2	2	.0000	.0004	.0857
			4	4	.0003	.0918	
		1					
			1	0	-.0000	-.0000	-.0004 -.0714
			1	2	.0000	.0005	.0990
			3	2	-.0000	-.0002	-.0324
			3	4	.0006	.1551	
			5	4	-.0001	-.0187	
			5	6	.5209		
1F 5/2	2P 3/2	0					
			2	2	.0000	-.0002	-.1134
			4	4	-.0001	-.3433	
		1					
			1	2	-.0000	.0008	.3674
			2	2	-.0000	.0005	.2314
			3	2	-.0000	.0002	.0700
			3	4	.0001	.2512	
			4	4	.0001	.3838	
1F 5/2	2P 1/2	0					
			2	2	-.0000	.0005	.2121
		1					
			2	2	.0000	-.0004	-.1732
			3	2	.0000	-.0001	-.0391
			3	4	.0002	.4494	
2P 3/2	2P 3/2	0					
			0	0	.0000	.0000	.0001 .4183
			2	2	.0000	-.0001	.2291
		1					
			1	0	.0000	.0000	.0001 .3118
			1	2	-.0000	.0001	-.1080
			3	2	.0000	-.0002	.3969
2P 3/2	2P 1/2	0					
			2	2	.0000	-.0002	.3240
		1					
			1	0	-.0000	-.0000	-.0001 -.3943
			1	2	-.0000	.0001	-.1708
			2	2	.0000	-.0002	.3968
2P 1/2	2P 1/2	0					
			0	0	.0000	.0000	.0001 .2958
		1					
			1	0	-.0000	-.0000	-.0000 -.0986
			1	2	.0000	-.0002	.3416

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

MASS= 80 NU= .232

1F 7/2	1F 7/2	0					
			0	0	-.0000	.0013	-.0253	.1688
			2	2	.0006	-.0140	.1009	
			4	4	-.0127	.1172		
			6	6	.2109			
		1						
			1	0	-.0000	.0009	-.0166	.1105
			1	2	-.0004	.0089	-.0638	
			3	2	.0006	-.0136	.0979	
			3	4	.0056	-.0511		
			5	4	-.0179	.1645		
			5	6	-.0589			
			7	6	.5581			
1F 7/2	1F 5/2	0					
			2	2	.0003	-.0069	.0494	
			4	4	-.0134	.1235		
			6	6	.5166			
		1						
			1	0	.0000	-.0014	.0271	-.1804
			1	2	-.0005	.0108	-.0781	
			2	2	.0008	-.0196	.1412	
			3	2	-.0006	.0134	-.0964	
			3	4	.0113	-.1039		
			4	4	-.0210	.1933		
			5	4	.0108	-.0999		
			5	6	-.1938			
			6	6	.5580			
1F 7/2	2P 3/2	0					
			2	2	-.0002	-.0171	.2773	
			4	4	-.0025	.2554		
		1						
			2	2	-.0002	-.0140	.2264	
			3	2	-.0002	-.0145	.2343	
			3	4	.0007	-.0748		
			4	4	-.0011	.1142		
			5	4	-.0052	.5235		
1F 7/2	2P 1/2	0					
			4	4	-.0030	.3022		
		1						
			3	2	.0002	.0167	-.2706	
			3	4	.0006	-.0648		
			4	4	-.0033	.3379		
1F 5/2	1F 5/2	0					
			0	0	-.0000	.0011	-.0219	.1461
			2	2	.0005	-.0119	.0856	
			4	4	-.0099	.0916		
		1						
			1	0	.0000	-.0006	.0107	-.0713
			1	2	.0006	-.0137	.0988	
			3	2	-.0002	.0045	-.0323	
			3	4	-.0168	.1548		
			5	4	.0020	-.0186		
			5	6	.5201			
1F 5/2	2P 3/2	0					
			2	2	.0001	.0070	-.1132	
			4	4	.0034	-.3427		
		1						
			1	2	-.0002	-.0226	.3668	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				2	2	-.0002	-.0143	.2310	
				3	2	-.0000	-.0043	.0699	
				3	4	-.0025	.2508		
				4	4	-.0038	.3831		
1F	5/2	2P	1/2	0					
				2	2	-.0001	-.0131	.2118	
				1					
				2	2	.0001	.0107	-.1729	
				3	2	.0000	.0024	-.0391	
				3	4	-.0044	.4487		
2P	3/2	2P	3/2	0					
				0	0	-.0001	.0002	-.0030	.4177
				2	2	.0005	.0035	.2288	
				1					
				1	0	-.0000	.0001	-.0022	.3113
				1	2	-.0002	-.0017	-.1078	
				3	2	.0009	.0061	.3962	
2P	3/2	2P	1/2	0					
				2	2	.0007	.0050	.3235	
				1					
				1	0	.0001	-.0001	.0028	-.3937
				1	2	-.0004	-.0026	-.1705	
				2	2	.0009	.0061	.3962	
2P	1/2	2P	1/2	0					
				0	0	-.0000	.0001	-.0021	.2953
				1					
				1	0	.0000	-.0000	.0007	-.0984
				1	2	.0007	.0053	.3410	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

NN1= 3 NN2= 4

N L J	N L J	S	J	L	G(1)	G(2)	G(3)	G(4)	G(5)	G(6)	G(7)
		MASS= 80 NU= .232									
1F 7/2	1G 9/2	0									
			1	1	-.0000	.0013	-.0214	.1258			
			3	3	.0008	-.0155	.1008				
			5	5	-.0157	.1334					
			7	7	.2631						
		1									
			1	1	.0000	-.0009	.0151	-.0889			
			2	1	-.0000	.0009	-.0147	.0864			
			2	3	-.0004	.0080	-.0521				
			3	3	-.0002	.0045	-.0291				
			4	3	.0008	-.0161	.1050				
			4	5	.0061	-.0521					
			5	5	.0029	-.0244					
			6	5	-.0236	.1998					
			6	7	-.0675						
			7	7	-.0352						
			8	7	.7382						
1F 7/2	1G 7/2	0									
			1	1	-.0000	.0002	-.0036	.0213			
			3	3	.0003	-.0069	.0451				
			5	5	-.0133	.1127					
			7	7	.4921						
		1									
			0	1	.0000	-.0018	.0287	-.1687			
			1	1	-.0000	.0013	-.0205	.1203			
			2	1	.0000	-.0005	.0089	-.0521			
			2	3	-.0007	.0133	-.0864				
			3	3	.0008	-.0160	.1041				
			4	3	-.0004	.0080	-.0521				
			4	5	.0124	-.1050					
			5	5	-.0194	.1647					
			6	5	.0080	-.0675					
			6	7	-.1998						
			7	7	.5261						
1F 7/2	2D 5/2	0									
			1	1	.0000	-.0001	-.0192	.2343			
			3	3	-.0004	-.0102	.1832				
			5	5	.0020	.2226					
		1									
			1	1	.0000	-.0001	-.0136	.1657			
			2	1	.0000	-.0001	-.0141	.1722			
			2	3	.0002	.0047	-.0846				
			3	3	-.0001	-.0030	.0529				
			4	3	-.0005	-.0126	.2264				
			4	5	-.0006	-.0664					
			5	5	.0004	.0406					
			6	5	.0049	.5377					
1F 7/2	2D 3/2	0									
			3	3	-.0002	-.0059	.1058				
			5	5	.0031	.3401					
		1									
			2	1	-.0000	.0001	.0188	-.2296			
			2	3	.0001	.0035	-.0635				
			3	3	-.0004	-.0102	.1832				

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			4	3	.0003	.0076	-.1365
			4	5	-.0010	-.1101	
			5	5	.0034	.3726	
1F	7/2	3S 1/2	0				
			3	3	-.0004	-.0034	.2423
			1				
			3	3	-.0003	-.0029	.2099
			4	3	-.0005	-.0045	.3206
1F	5/2	1G 9/2	0				
			3	3	-.0003	.0063	-.0412
			5	5	.0129	-.1089	
			7	7	-.4833		
			1				
			2	1	-.0000	.0013	-.0217 .1276
			2	3	.0003	-.0054	.0353
			3	3	.0007	-.0146	.0951
			4	3	.0006	-.0126	.0823
			4	5	-.0078	.0664	
			5	5	-.0188	.1591	
			6	5	-.0109	.0923	
			6	7	.1462		
			7	7	.5166		
1F	5/2	1G 7/2	0				
			1	1	-.0000	.0012	-.0188 .1105
			3	3	.0007	-.0133	.0864
			5	5	-.0124	.1050	
			1				
			1	1	-.0000	.0008	-.0133 .0781
			2	1	.0000	-.0005	.0077 -.0451
			2	3	.0008	-.0153	.0997
			3	3	.0002	-.0038	.0249
			4	3	-.0002	.0045	-.0291
			4	5	-.0222	.1877	
			5	5	-.0023	.0192	
			6	5	.0023	-.0195	
			6	7	.6922		
1F	5/2	2D 5/2	0				
			1	1	-.0000	.0000	.0043 -.0524
			3	3	.0002	.0065	-.1159
			5	5	-.0032	-.3520	
			1				
			0	1	.0000	-.0001	-.0254 .3100
			1	1	.0000	-.0001	-.0182 .2223
			2	1	.0000	-.0000	-.0077 .0937
			2	3	-.0003	-.0087	.1554
			3	3	-.0004	-.0112	.2007
			4	3	-.0002	-.0048	.0864
			4	5	.0016	.1740	
			5	5	.0035	.3856	
1F	5/2	2D 3/2	0				
			1	1	.0000	-.0001	-.0161 .1961
			3	3	-.0003	-.0079	.1419
			1				
			1	1	-.0000	.0001	.0114 -.1386
			2	1	-.0000	.0000	.0058 -.0703
			2	3	-.0004	-.0116	.2072
			3	3	.0001	.0023	-.0410
			4	3	.0001	.0017	-.0305
			4	5	.0045	.4923	
1F	5/2	3S 1/2	0				
			3	3	.0003	.0029	-.2099
			1				

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				2	3	-.0005	-.0045	.3206
				3	3	-.0004	-.0034	.2423
2P	3/2	1G	9/2	0				
				3	3	.0001	-.0175	.2086
				5	5	-.0058	.2121	
				1				
				3	3	-.0001	.0151	-.1806
				4	3	.0001	-.0147	.1761
				4	5	.0014	-.0516	
				5	5	.0032	-.1162	
				6	5	-.0123	.4499	
2P	3/2	1G	7/2	0				
				3	3	.0001	-.0078	.0933
				5	5	-.0082	.2999	
				1				
				2	3	-.0002	.0234	-.2798
				3	3	.0001	-.0135	.1616
				4	3	-.0000	.0034	-.0401
				4	5	.0062	-.2265	
				5	5	-.0089	.3286	
2P	3/2	2D	5/2	0				
				1	1	-.0001	-.0001	-.0069	.3668
				3	3	.0005	.0037	.2655	
				1				
				1	1	.0000	.0001	.0049	-.2594
				2	1	-.0000	-.0001	-.0058	.3069
				2	3	-.0002	-.0014	-.0969	
				3	3	-.0001	-.0011	-.0766	
				4	3	.0009	.0072	.5140	
2P	3/2	2D	3/2	0				
				1	1	-.0000	-.0000	-.0023	.1223
				3	3	.0006	.0045	.3251	
				1				
				0	1	.0001	.0002	.0089	-.4735
				1	1	-.0000	-.0001	-.0065	.3458
				2	1	.0000	.0001	.0025	-.1339
				2	3	-.0004	-.0031	-.2221	
				3	3	.0007	.0052	.3754	
2P	3/2	3S	1/2	0				
				1	1	.0000	.0006	.0068	.3616
				1				
				1	1	.0000	.0004	.0048	.2557
				2	1	.0000	.0007	.0084	.4429
2P	1/2	1G	9/2	0				
				5	5	.0071	-.2598	
				1				
				4	3	.0001	-.0178	.2124
				4	5	-.0012	.0428	
				5	5	-.0078	.2845	
2P	1/2	1G	7/2	0				
				3	3	.0001	-.0135	.1616
				1				
				3	3	.0001	-.0117	.1399
				4	3	-.0000	.0020	-.0237
				4	5	-.0104	.3829	
2P	1/2	2D	5/2	0				
				3	3	-.0005	-.0041	-.2968
				1				
				2	1	-.0000	-.0001	-.0062	.3281
				2	3	.0002	.0013	.0907	
				3	3	.0006	.0048	.3427	
2P	1/2	2D	3/2	0				

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			1	1	-.0000	-.0001	-.0052	.2734
		1						
			1	1	-.0000	-.0001	-.0037	.1933
			2	1	.0000	.0000	.0013	-.0670
			2	3	.0008	.0062	.4442	
2P 1/2	3S 1/2	0						
			1	1	-.0000	-.0004	-.0048	-.2557
		1						
			0	1	.0000	.0007	.0084	.4429
			1	1	.0000	.0006	.0068	.3616

MASS=110 NU= .209

1F 7/2	1G 9/2	0					
			1	1	-.0003	.0060	-.0455	.1250
			3	3	.0035	-.0329	.1003	
			5	5	-.0335	.1326		
			7	7	.2615			
		1						
			1	1	.0002	-.0042	.0322	-.0884
			2	1	-.0002	.0041	-.0313	.0859
			2	3	-.0018	.0170	-.0518	
			3	3	-.0010	.0095	-.0289	
			4	3	.0036	-.0343	.1043	
			4	5	.0131	-.0518		
			5	5	.0061	-.0242		
			6	5	-.0502	.1987		
			6	7	-.0672			
			7	7	-.0349			
			8	7	.7339			
1F 7/2	1G 7/2	0						
			1	1	-.0001	.0010	-.0077	.0211
			3	3	.0015	-.0147	.0448	
			5	5	-.0283	.1121		
			7	7	.4893			
		1						
			0	1	.0004	-.0080	.0611	-.1678
			1	1	-.0003	.0057	-.0435	.1196
			2	1	.0001	-.0025	.0188	-.0518
			2	3	-.0030	.0282	-.0859	
			3	3	.0036	-.0340	.1035	
			4	3	-.0018	.0170	-.0518	
			4	5	.0264	-.1043		
			5	5	-.0414	.1637		
			6	5	.0170	-.0672		
			6	7	-.1987			
			7	7	.5231			
1F 7/2	2D 5/2	0						
			1	1	.0003	-.0004	-.0408	.2330
			3	3	-.0017	-.0218	.1821	
			5	5	.0043	.2214		
		1						
			1	1	.0002	-.0003	-.0289	.1647
			2	1	.0002	-.0003	-.0300	.1712
			2	3	.0008	.0101	-.0841	
			3	3	-.0005	-.0063	.0526	
			4	3	-.0021	-.0269	.2251	
			4	5	-.0013	-.0660		
			5	5	.0008	.0404		
			6	5	.0104	.5346		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

1F 7/2	2D 3/2	0					
			3	3	-.0010	-.0126	.1051
			5	5	.0066	.3381	
		1					
			2	1	-.0003	.0004	.0400
			2	3	.0006	.0075	-.0631
			3	3	-.0017	-.0218	.1821
			4	3	.0013	.0162	-.1357
			4	5	-.0021	-.1094	
			5	5	.0072	.3704	
1F 7/2	3S 1/2	0					
			3	3	-.0018	-.0072	.2409
		1					
			3	3	-.0015	-.0062	.2086
			4	3	-.0023	-.0095	.3187
1F 5/2	1G 9/2	0					
			3	3	-.0014	.0134	-.0409
			5	5	.0274	-.1083	
			7	7	-.4805		
		1					
			2	1	-.0003	.0061	-.0462
			2	3	.0012	-.0115	.0350
			3	3	.0033	-.0311	.0945
			4	3	.0028	-.0269	.0819
			4	5	-.0167	.0660	
			5	5	-.0400	.1582	
			6	5	-.0232	.0918	
			6	7	.1454		
			7	7	.5137		
1F 5/2	1G 7/2	0					
			1	1	-.0003	.0052	-.0400
			3	3	.0030	-.0282	.0859
			5	5	-.0264	.1043	
		1					
			1	1	-.0002	.0037	-.0283
			2	1	.0001	-.0021	.0163
			2	3	.0034	-.0326	.0991
			3	3	.0009	-.0081	.0248
			4	3	-.0010	.0095	-.0289
			4	5	-.0472	.1867	
			5	5	-.0048	.0191	
			6	5	.0049	-.0194	
			6	7	.6882		
1F 5/2	2D 5/2	0					
			1	1	-.0001	.0001	.0091
			3	3	.0011	.0138	-.1152
			5	5	-.0068	-.3500	
		1					
			0	1	.0004	-.0005	-.0540
			1	1	.0003	-.0004	-.0387
			2	1	.0001	-.0002	-.0163
			2	3	-.0015	-.0185	.1545
			3	3	-.0019	-.0238	.1995
			4	3	-.0008	-.0103	.0859
			4	5	.0034	.1730	
			5	5	.0074	.3834	
1F 5/2	2D 3/2	0					
			1	1	.0003	-.0003	-.0342
			3	3	-.0013	-.0169	.1411
		1					
			1	1	-.0002	.0002	.0242
			2	1	-.0001	.0001	.0123

							.1268
							.0777
							-.0448
							.3082
							.2210
							.0932
							.1949
							-.1378
							-.0699

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				2	3	-.0019	-.0246	.2060
				3	3	.0004	.0049	-.0407
				4	3	.0003	.0036	-.0304
				4	5	.0095	.4894	
1F	5/2	3S	1/2	0				
				3	3	.0015	.0062	-.2086
				1				
				2	3	-.0023	-.0095	.3187
				3	3	-.0018	-.0072	.2409
2P	3/2	1G	9/2	0				
				3	3	.0007	-.0372	.2074
				5	5	-.0123	.2109	
				1				
				3	3	-.0006	.0322	-.1796
				4	3	.0005	-.0314	.1751
				4	5	.0030	-.0513	
				5	5	.0067	-.1155	
				6	5	-.0261	.4473	
2P	3/2	1G	7/2	0				
				3	3	.0003	-.0166	.0927
				5	5	-.0174	.2982	
				1				
				2	3	-.0009	.0499	-.2782
				3	3	.0005	-.0288	.1606
				4	3	-.0001	.0072	-.0399
				4	5	.0131	-.2252	
				5	5	-.0190	.3267	
2P	3/2	2D	5/2	0				
				1	1	-.0005	-.0006	-.0148	.3647
				3	3	.0021	.0079	.2639	
				1					
				1	1	.0004	.0005	.0104	-.2579
				2	1	-.0004	-.0005	-.0123	.3051
				2	3	-.0008	-.0029	-.0964	
				3	3	-.0006	-.0023	-.0762	
				4	3	.0041	.0153	.5111	
2P	3/2	2D	3/2	0					
				1	1	-.0002	-.0002	-.0049	.1216
				3	3	.0026	.0097	.3232	
				1					
				0	1	.0007	.0008	.0190	-.4708
				1	1	-.0005	-.0006	-.0139	.3438
				2	1	.0002	.0002	.0054	-.1332
				2	3	-.0018	-.0066	-.2208	
				3	3	.0030	.0112	.3732	
2P	3/2	3S	1/2	0					
				1	1	.0001	.0026	.0145	.3596
				1					
				1	1	.0001	.0019	.0103	.2542
				2	1	.0001	.0032	.0178	.4404
2P	1/2	1G	9/2	0					
				5	5	.0151	-.2583		
				1					
				4	3	.0007	-.0378	.2112	
				4	5	-.0025	.0426		
				5	5	-.0165	.2829		
2P	1/2	1G	7/2	0					
				3	3	.0005	-.0288	.1606	
				1					
				3	3	.0004	-.0249	.1391	
				4	3	-.0001	.0042	-.0236	
				4	5	-.0222	.3807		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

2P 1/2	2D 5/2	0					
			3	3	-.0024	-.0088	-.2951
		1					
			2	1	-.0005	-.0006	-.0132	.3262
			2	3	.0007	.0027	.0901
			3	3	.0027	.0102	.3407
2P 1/2	2D 3/2	0					
			1	1	-.0004	-.0005	-.0110	.2718
		1					
			1	1	-.0003	-.0003	-.0078	.1922
			2	1	.0001	.0001	.0027	-.0666
			2	3	.0035	.0132	.4416
2P 1/2	3S 1/2	0					
			1	1	-.0001	-.0019	-.0103	-.2542
		1					
			0	1	.0001	.0032	.0178	.4404
			1	1	.0001	.0026	.0145	.3596

MASS=140 NU= .193

1F 7/2	1G 9/2	0					
			1	1	-.0008	.0116	-.0633	.1241
			3	3	.0067	-.0458	.0995
			5	5	-.0466	.1317
			7	7	.2597
		1					
			1	1	.0006	-.0082	.0447	-.0878
			2	1	-.0006	.0080	-.0434	.0852
			2	3	-.0035	.0236	-.0514
			3	3	-.0019	.0132	-.0287
			4	3	.0070	-.0477	.1036
			4	5	.0182	-.0514
			5	5	.0085	-.0240
			6	5	-.0697	.1972
			6	7	-.0667
			7	7	-.0347
			8	7	.7287
1F 7/2	1G 7/2	0					
			1	1	-.0001	.0020	-.0107	.0210
			3	3	.0030	-.0205	.0445
			5	5	-.0394	.1113
			7	7	.4858
		1					
			0	1	.0011	-.0156	.0849	-.1666
			1	1	-.0008	.0111	-.0605	.1187
			2	1	.0004	-.0048	.0262	-.0514
			2	3	-.0058	.0392	-.0852
			3	3	.0070	-.0473	.1028
			4	3	-.0035	.0236	-.0514
			4	5	.0366	-.1036
			5	5	-.0575	.1625
			6	5	.0236	-.0667
			6	7	-.1972
			7	7	.5193
1F 7/2	2D 5/2	0					
			1	1	.0009	-.0008	-.0568	.2313
			3	3	-.0033	-.0302	.1808
			5	5	.0060	.2198
		1					
			1	1	.0006	-.0006	-.0401	.1636

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			2	1	.0006	-.0006	-.0417	.1700
			2	3	.0015	.0140	-.0835	
			3	3	-.0010	-.0087	.0522	
			4	3	-.0041	-.0374	.2235	
			4	5	-.0018	-.0655		
			5	5	.0011	.0401		
			6	5	.0144	.5308		
1F	7/2	2D 3/2	0					
			3	3	-.0019	-.0175	.1044	
			5	5	.0091	.3357		
			1					
			2	1	-.0009	.0008	.0556	-.2266
			2	3	.0012	.0105	-.0626	
			3	3	-.0033	-.0302	.1808	
			4	3	.0025	.0225	-.1348	
			4	5	-.0030	-.1087		
			5	5	.0100	.3678		
1F	7/2	3S 1/2	0					
			3	3	-.0034	-.0100	.2392	
			1					
			3	3	-.0030	-.0087	.2072	
			4	3	-.0045	-.0132	.3164	
1F	5/2	1G 9/2	0					
			3	3	-.0028	.0187	-.0406	
			5	5	.0380	-.1075		
			7	7	-.4770			
			1					
			2	1	-.0009	.0118	-.0642	.1259
			2	3	.0024	-.0160	.0348	
			3	3	.0064	-.0432	.0938	
			4	3	.0055	-.0374	.0813	
			4	5	-.0232	.0655		
			5	5	-.0555	.1570		
			6	5	-.0322	.0911		
			6	7	.1444			
			7	7	.5100			
1F	5/2	1G 7/2	0					
			1	1	-.0007	.0102	-.0556	.1090
			3	3	.0058	-.0392	.0852	
			5	5	-.0366	.1036		
			1					
			1	1	-.0005	.0072	-.0393	.0771
			2	1	.0003	-.0042	.0227	-.0445
			2	3	.0067	-.0453	.0984	
			3	3	.0017	-.0113	.0246	
			4	3	-.0019	.0132	-.0287	
			4	5	-.0655	.1853		
			5	5	-.0067	.0189		
			6	5	.0068	-.0192		
			6	7	.6832			
1F	5/2	2D 5/2	0					
			1	1	-.0002	.0002	.0127	-.0517
			3	3	.0021	.0191	-.1144	
			5	5	-.0095	-.3475		
			1					
			0	1	.0012	-.0011	-.0751	.3060
			1	1	.0008	-.0008	-.0538	.2194
			2	1	.0004	-.0003	-.0227	.0925
			2	3	-.0028	-.0257	.1534	
			3	3	-.0037	-.0331	.1981	
			4	3	-.0016	-.0143	.0852	
			4	5	.0047	.1718		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				5	5	.0104	.3807	
1F	5/2	2D	3/2	0				
				1	1	.0007	-.0007	-.0475	.1935
				3	3	-.0026	-.0234	.1401	
				1					
				1	1	-.0005	.0005	.0336	-.1368
				2	1	-.0003	.0002	.0170	-.0694
				2	3	-.0038	-.0342	.2046	
				3	3	.0007	.0068	-.0404	
				4	3	.0006	.0050	-.0301	
				4	5	.0132	.4859		
1F	5/2	3S	1/2	0				
				3	3	.0030	.0087	-.2072	
				1					
				2	3	-.0045	-.0132	.3164	
				3	3	-.0034	-.0100	.2392	
2P	3/2	1G	9/2	0				
				3	3	.0013	-.0517	.2059	
				5	5	-.0171	.2094		
				1					
				3	3	-.0011	.0447	-.1783	
				4	3	.0011	-.0436	.1738	
				4	5	.0042	-.0510		
				5	5	.0094	-.1147		
				6	5	-.0362	.4441		
2P	3/2	1G	7/2	0				
				3	3	.0006	-.0231	.0921	
				5	5	-.0242	.2961		
				1					
				2	3	-.0017	.0693	-.2762	
				3	3	.0010	-.0400	.1595	
				4	3	-.0002	.0099	-.0396	
				4	5	.0182	-.2236		
				5	5	-.0265	.3243		
2P	3/2	2D	5/2	0				
				1	1	-.0014	-.0013	-.0205	.3621
				3	3	.0041	.0110	.2620	
				1					
				1	1	.0010	.0009	.0145	-.2560
				2	1	-.0012	-.0010	-.0172	.3029
				2	3	-.0015	-.0040	-.0957	
				3	3	-.0012	-.0032	-.0756	
				4	3	.0080	.0212	.5074	
2P	3/2	2D	3/2	0				
				1	1	-.0005	-.0004	-.0068	.1207
				3	3	.0050	.0134	.3209	
				1					
				0	1	.0018	.0016	.0265	-.4674
				1	1	-.0013	-.0012	-.0193	.3413
				2	1	.0005	.0005	.0075	-.1322
				2	3	-.0034	-.0092	-.2192	
				3	3	.0058	.0155	.3706	
2P	3/2	3S	1/2	0				
				1	1	.0003	.0051	.0202	.3570
				1					
				1	1	.0002	.0036	.0143	.2524
				2	1	.0003	.0063	.0248	.4372
2P	1/2	1G	9/2	0				
				5	5	.0209	-.2564		
				1					
				4	3	.0013	-.0526	.2097	
				4	5	-.0034	.0423		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

					5	5	-.0229	.2809		
2P	1/2	1G	7/2	0						
					3	3	.0010	-.0400	.1595	
				1						
					3	3	.0008	-.0347	.1381	
					4	3	-.0001	.0059	-.0234	
					4	5	-.0308	.3780		
2P	1/2	2D	5/2	0						
					3	3	-.0046	-.0123	-.2930	
				1						
					2	1	-.0012	-.0011	-.0183	.3238
					2	3	.0014	.0037	.0895	
					3	3	.0053	.0141	.3383	
2P	1/2	2D	3/2	0						
					1	1	-.0010	-.0009	-.0153	.2699
				1						
					1	1	-.0007	-.0007	-.0108	.1908
					2	1	.0003	.0002	.0037	-.0661
					2	3	.0069	.0183	.4385	
2P	1/2	3S	1/2	0						
					1	1	-.0002	-.0036	-.0143	-.2524
				1						
					0	1	.0003	.0063	.0248	.4372
					1	1	.0003	.0051	.0202	.3570

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

NN1= 4 NN2= 4

N L J	N L J	S	J	L	G(1)	G(2)	G(3)	G(4)	G(5)	G(6)	G(7)
		MASS= 80 NU= .232									
1G 9/2	1G 9/2	0									
			0	0	.0000	-.0000	.0013	-.0175	.0889		
			2	2	-.0000	.0007	-.0097	.0514			
			4	4	.0005	-.0091	.0545				
			6	6	-.0103	.0812					
			8	8	.1740						
		1									
			1	0	.0000	-.0000	.0008	-.0112	.0568		
			1	2	.0000	-.0004	.0064	-.0342			
			3	2	-.0000	.0006	-.0086	.0458			
			3	4	-.0002	.0045	-.0270				
			5	4	.0006	-.0106	.0636				
			5	6	.0038	-.0300					
			7	6	-.0167	.1320					
			7	8	-.0424						
			9	8	.5221						
1G 9/2	1G 7/2	0									
			2	2	-.0000	.0003	-.0036	.0194			
			4	4	.0004	-.0069	.0412				
			6	6	-.0136	.1074					
			8	8	.4921						
		1									
			1	0	-.0000	.0000	-.0014	.0190	-.0968		
			1	2	.0000	-.0005	.0075	-.0401			
			2	2	-.0000	.0009	-.0134	.0713			
			3	2	.0000	-.0007	.0096	-.0508			
			3	4	-.0004	.0081	-.0486				
			4	4	.0008	-.0138	.0828				
			5	4	-.0005	.0085	-.0509				
			5	6	.0095	-.0749					
			6	6	-.0189	.1491					
			7	6	.0087	-.0685					
			7	8	-.1634						
			8	8	.5220						
1G 9/2	2D 5/2	0									
			2	2	.0000	.0003	-.0181	.1672			
			4	4	-.0001	-.0114	.1484				
			6	6	-.0017	.1973					
		1									
			2	2	.0000	.0003	-.0148	.1365			
			3	2	.0000	.0002	-.0131	.1210			
			3	4	.0000	.0043	-.0561				
			4	4	-.0000	-.0051	.0664				
			5	4	-.0001	-.0147	.1909				
			5	6	.0004	-.0519					
			6	6	-.0005	.0609					
			7	6	-.0042	.5002					
1G 9/2	2D 3/2	0									
			4	4	-.0001	-.0071	.0926				
			6	6	-.0027	.3164					
		1									
			3	2	-.0000	-.0004	.0194	-.1788			
			3	4	.0000	.0029	-.0380				
			4	4	-.0001	-.0112	.1449				

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

		5	4	.0001	.0094	-.1223		
		5	6	.0007	-.0811			
		6	6	-.0029	.3417			
1G 9/2	3S 1/2	0						
		4	4	-.0002	-.0078	.2031		
		1						
		4	4	-.0002	-.0070	.1816		
		5	4	-.0003	-.0105	.2724		
1G 7/2	1G 7/2	0						
		0	0	.0000	-.0000	.0012	-.0156	.0796
		2	2	-.0000	.0006	-.0086	.0455	
		4	4	.0004	-.0078	.0469		
		6	6	-.0081	.0642			
		1						
		1	0	-.0000	.0000	-.0006	.0080	-.0405
		1	2	-.0000	.0006	-.0090	.0480	
		3	2	.0000	-.0003	.0038	-.0201	
		3	4	.0006	-.0103	.0615		
		5	4	-.0001	.0025	-.0152		
		5	6	-.0159	.1254			
		7	6	.0014	-.0113			
		7	8	.4940				
1G 7/2	2D 5/2	0						
		2	2	-.0000	-.0001	.0051	-.0473	
		4	4	.0001	.0081	-.1050		
		6	6	.0028	-.3335			
		1						
		1	2	.0000	.0004	-.0243	.2243	
		2	2	.0000	.0003	-.0146	.1352	
		3	2	.0000	.0001	-.0050	.0462	
		3	4	-.0001	-.0113	.1471		
		4	4	-.0001	-.0127	.1643		
		5	4	-.0000	-.0044	.0566		
		5	6	-.0015	.1751			
		6	6	-.0030	.3602			
1G 7/2	2D 3/2	0						
		2	2	.0000	.0003	-.0154	.1419	
		4	4	-.0001	-.0089	.1160		
		1						
		2	2	-.0000	-.0002	.0125	-.1159	
		3	2	-.0000	-.0001	.0043	-.0400	
		3	4	-.0001	-.0131	.1699		
		4	4	.0000	.0040	-.0519		
		5	4	.0000	.0017	-.0216		
		5	6	-.0039	.4586			
1G 7/2	3S 1/2	0						
		4	4	.0002	.0070	-.1816		
		1						
		3	4	-.0003	-.0105	.2724		
		4	4	-.0002	-.0078	.2031		
2D 5/2	2D 5/2	0						
		0	0	.0000	-.0000	-.0002	-.0135	.3100
		2	2	-.0000	-.0001	-.0050	.1738	
		4	4	.0003	.0021	.1651		
		1						
		1	0	.0000	-.0000	-.0001	-.0092	.2118
		1	2	.0000	.0000	.0029	-.1003	
		3	2	-.0000	-.0001	-.0056	.1971	
		3	4	-.0001	-.0007	-.0558		
		5	4	.0007	.0047	.3693		
2D 5/2	2D 3/2	0						
		2	2	-.0000	-.0001	-.0035	.1229	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			4	4	.0006	.0042	.3302	
		1						
			1	0	-.0000	.0000	.0002	.0140	-.3201
			1	2	.0000	.0001	.0038	-.1327	
			2	2	-.0000	-.0001	-.0071	.2508	
			3	2	.0000	.0001	.0043	-.1517	
			3	4	-.0003	-.0019	-.1450		
			4	4	.0007	.0047	.3692		
2D 5/2	3S 1/2	0							
			2	2	-.0000	.0003	.0017	.3041	
		1							
			2	2	-.0000	.0003	.0014	.2483	
			3	2	-.0000	.0004	.0022	.3926	
2D 3/2	2D 3/2	0							
			0	0	.0000	-.0000	-.0001	-.0110	.2531
			2	2	-.0000	-.0001	-.0038	.1327	
		1							
			1	0	-.0000	.0000	.0001	.0049	-.1132
			1	2	-.0000	-.0001	-.0053	.1877	
			3	2	.0000	.0000	.0009	-.0328	
			3	4	.0007	.0043	.3350		
2D 3/2	3S 1/2	0							
			2	2	.0000	-.0003	-.0014	-.2483	
		1							
			1	2	-.0000	.0004	.0022	.3926	
			2	2	-.0000	.0003	.0017	.3041	
3S 1/2	3S 1/2	0							
			0	0	.0000	.0000	.0007	.0068	.3132
		1							
			1	0	.0000	.0000	.0007	.0068	.3132

MASS=110 NU= .209

1G 9/2	1G 9/2	0						
			0	0	.0000	-.0004	.0060	-.0372	.0884
			2	2	-.0002	.0031	-.0205	.0511	
			4	4	.0022	-.0193	.0542		
			6	6	-.0219	.0807			
			8	8	.1730				
		1							
			1	0	.0000	-.0003	.0038	-.0237	.0564
			1	2	.0001	-.0020	.0137	-.0340	
			3	2	-.0002	.0027	-.0183	.0455	
			3	4	-.0011	.0096	-.0268		
			5	4	.0026	-.0226	.0632		
			5	6	.0081	-.0298			
			7	6	-.0356	.1313			
			7	8	-.0421				
			9	8	.5191				
1G 9/2	1G 7/2	0							
			2	2	-.0001	.0012	-.0078	.0193	
			4	4	.0017	-.0146	.0409		
			6	6	-.0290	.1068			
			8	8	.4893				
		1							
			1	0	-.0000	.0005	-.0065	.0405	-.0963
			1	2	.0001	-.0024	.0161	-.0399	
			2	2	-.0003	.0042	-.0285	.0709	
			3	2	.0002	-.0030	.0203	-.0505	
			3	4	-.0020	.0173	-.0483		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			4	4	.0034	-.0294	.0824	
			5	4	-.0021	.0181	-.0506	
			5	6	.0202	-.0745		
			6	6	-.0402	.1483		
			7	6	.0185	-.0681		
			7	8	-.1624			
			8	8	.5190			
1G	9/2	2D 5/2	0					
			2	2	.0002	.0015	-.0385	.1663
			4	4	-.0005	-.0243	.1476	
			6	6	-.0035	.1962		
			1					
			2	2	.0001	.0012	-.0315	.1357
			3	2	.0001	.0011	-.0279	.1203
			3	4	.0002	.0092	-.0558	
			4	4	-.0002	-.0109	.0660	
			5	4	-.0006	-.0313	.1898	
			5	6	.0009	-.0516		
			6	6	-.0011	.0605		
			7	6	-.0090	.4973		
1G	9/2	2D 3/2	0					
			4	4	-.0003	-.0152	.0920	
			6	6	-.0057	.3145		
			1					
			3	2	-.0002	-.0016	.0412	-.1777
			3	4	.0001	.0062	-.0378	
			4	4	-.0005	-.0238	.1440	
			5	4	.0004	.0200	-.1216	
			5	6	.0015	-.0806		
			6	6	-.0061	.3398		
1G	9/2	3S 1/2	0					
			4	4	-.0010	-.0166	.2019	
			1					
			4	4	-.0009	-.0149	.1806	
			5	4	-.0013	-.0223	.2709	
1G	7/2	1G 7/2	0					
			0	0	.0000	-.0004	.0053	-.0332 .0791
			2	2	-.0002	.0027	-.0182	.0453
			4	4	.0019	-.0167	.0467	
			6	6	-.0173	.0638		
			1					
			1	0	-.0000	.0002	-.0027	.0169 -.0403
			1	2	-.0002	.0029	-.0192	.0477
			3	2	.0001	-.0012	.0080	-.0200
			3	4	.0025	-.0218	.0611	
			5	4	-.0006	.0054	-.0151	
			5	6	-.0338	.1247		
			7	6	.0031	-.0113		
			7	8	.4912			
1G	7/2	2D 5/2	0					
			2	2	-.0000	-.0004	.0109	-.0470
			4	4	.0003	.0172	-.1043	
			6	6	.0060	-.3316		
			1					
			1	2	.0002	.0020	-.0517	.2231
			2	2	.0001	.0012	-.0311	.1344
			3	2	.0000	.0004	-.0106	.0459
			3	4	-.0005	-.0241	.1462	
			4	4	-.0005	-.0269	.1633	
			5	4	-.0002	-.0093	.0563	
			5	6	-.0031	.1741		
			6	6	-.0065	.3581		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

1G 7/2	2D 3/2	0						
			2	2	.0001	.0013	-.0327	.1411
			4	4	-.0004	-.0190	.1154	
		1						
			2	2	-.0001	-.0010	.0267	-.1152
			3	2	-.0000	-.0004	.0092	-.0397
			3	4	-.0005	-.0278	.1689	
			4	4	.0002	.0085	-.0516	
			5	4	.0001	.0035	-.0215	
			5	6	-.0082	.4559		
1G 7/2	3S 1/2	0						
			4	4	.0009	.0149	-.1806	
		1						
			3	4	-.0013	-.0223	.2709	
			4	4	-.0010	-.0166	.2019	
2D 5/2	2D 5/2	0						
			0	0	.0000	-.0003	-.0008	-.0288	.3082
			2	2	-.0003	-.0004	-.0105	.1728	
			4	4	.0015	.0045	.1642	
		1						
			1	0	.0000	-.0002	-.0005	-.0197	.2106
			1	2	.0002	.0002	.0061	-.0998	
			3	2	-.0003	-.0004	-.0119	.1959	
			3	4	-.0005	-.0015	-.0555		
			5	4	.0033	.0101	.3671		
2D 5/2	2D 3/2	0						
			2	2	-.0002	-.0003	-.0074	.1222	
			4	4	.0030	.0090	.3283		
		1						
			1	0	-.0000	.0004	.0008	.0297	-.3183
			1	2	.0002	.0003	.0080	-.1320	
			2	2	-.0004	-.0006	-.0152	.2494	
			3	2	.0002	.0003	.0092	-.1508	
			3	4	-.0013	-.0040	-.1442		
			4	4	.0033	.0101	.3671		
2D 5/2	3S 1/2	0						
			2	2	-.0001	.0015	.0037	.3024	
		1						
			2	2	-.0001	.0012	.0030	.2469	
			3	2	-.0002	.0020	.0048	.3903	
2D 3/2	2D 3/2	0						
			0	0	.0000	-.0003	-.0006	-.0235	.2517
			2	2	-.0002	-.0003	-.0080	.1320	
		1						
			1	0	-.0000	.0001	.0003	.0105	-.1126
			1	2	-.0003	-.0004	-.0114	.1866	
			3	2	.0001	.0001	.0020	-.0327	
			3	4	.0030	.0092	.3330		
2D 3/2	3S 1/2	0						
			2	2	.0001	-.0012	-.0030	-.2469	
		1						
			1	2	-.0002	.0020	.0048	.3903	
			2	2	-.0001	.0015	.0037	.3024	
3S 1/2	3S 1/2	0						
			0	0	.0000	.0002	.0032	.0145	.3114
		1						
			1	0	.0000	.0002	.0032	.0145	.3114

MASS=140 NU= .193

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

1G 9/2	1G 9/2	0						
			0	0	.0001	-.0012	.0116	-.0517	.0878
			2	2	-.0005	.0059	-.0286	.0507	
			4	4	.0044	-.0269	.0538		
			6	6	-.0304	.0801			
			8	8	.1718				
		1							
			1	0	.0000	-.0008	.0074	-.0330	.0560
			1	2	.0003	-.0040	.0190	-.0338	
			3	2	-.0005	.0053	-.0255	.0452	
			3	4	-.0022	.0133	-.0266		
			5	4	.0051	-.0314	.0628		
			5	6	.0112	-.0296			
			7	6	-.0495	.1303			
			7	8	-.0418				
			9	8	.5153				
1G 9/2	1G 7/2	0						
			2	2	-.0002	.0022	-.0108	.0192	
			4	4	.0033	-.0203	.0406		
			6	6	-.0403	.1060			
			8	8	.4858				
		1							
			1	0	-.0001	.0013	-.0126	.0562	-.0956
			1	2	.0004	-.0046	.0223	-.0396	
			2	2	-.0007	.0083	-.0397	.0704	
			3	2	.0005	-.0059	.0283	-.0502	
			3	4	-.0039	.0240	-.0480		
			4	4	.0067	-.0409	.0818		
			5	4	-.0041	.0251	-.0502		
			5	6	.0281	-.0740			
			6	6	-.0559	.1472			
			7	6	.0257	-.0676			
			7	8	-.1613				
			8	8	.5153				
1G 9/2	2D 5/2	0						
			2	2	.0005	.0029	-.0535	.1651	
			4	4	-.0009	-.0338	.1465		
			6	6	-.0049	.1948			
		1							
			2	2	.0004	.0024	-.0437	.1348	
			3	2	.0003	.0021	-.0388	.1195	
			3	4	.0003	.0128	-.0554		
			4	4	-.0004	-.0151	.0655		
			5	4	-.0012	-.0435	.1885		
			5	6	.0013	-.0513			
			6	6	-.0015	.0601			
			7	6	-.0125	.4938			
1G 9/2	2D 3/2	0						
			4	4	-.0006	-.0211	.0914		
			6	6	-.0079	.3123			
		1							
			3	2	-.0005	-.0031	.0572	-.1765	
			3	4	.0002	.0087	-.0375		
			4	4	-.0009	-.0330	.1430		
			5	4	.0008	.0279	-.1207		
			5	6	.0020	-.0800			
			6	6	-.0085	.3373			
1G 9/2	3S 1/2	0							
			4	4	-.0019	-.0231	.2004		
		1							
			4	4	-.0017	-.0207	.1793		
			5	4	-.0026	-.0310	.2689		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

1G 7/2	1G 7/2	0						
			0	0	.0000	-.0011	.0104	-.0462	.0785
			2	2	-.0005	.0053	-.0253	.0449	
			4	4	.0038	-.0232	.0463		
			6	6	-.0241	.0634			
		1							
			1	0	-.0000	.0005	-.0053	.0235	-.0400
			1	2	-.0005	.0056	-.0267	.0474	
			3	2	.0002	-.0023	.0112	-.0198	
			3	4	.0049	-.0303	.0607		
			5	4	-.0012	.0075	-.0150		
			5	6	-.0470	.1238			
			7	6	.0042	-.0112			
			7	8	.4877				
1G 7/2	2D 5/2	0						
			2	2	-.0001	-.0008	.0151	-.0467	
			4	4	.0006	.0239	-.1036		
			6	6	.0083	-.3292			
		1							
			1	2	.0006	.0039	-.0718	.2215	
			2	2	.0004	.0024	-.0433	.1334	
			3	2	.0001	.0008	-.0148	.0456	
			3	4	-.0009	-.0335	.1452		
			4	4	-.0010	-.0374	.1622		
			5	4	-.0003	-.0129	.0559		
			5	6	-.0044	.1729			
			6	6	-.0090	.3556			
1G 7/2	2D 3/2	0						
			2	2	.0004	.0025	-.0454	.1401	
			4	4	-.0007	-.0264	.1145		
		1							
			2	2	-.0003	-.0020	.0371	-.1144	
			3	2	-.0001	-.0007	.0128	-.0395	
			3	4	-.0010	-.0387	.1677		
			4	4	.0003	.0118	-.0512		
			5	4	.0001	.0049	-.0213		
			5	6	-.0115	.4527			
1G 7/2	3S 1/2	0						
			4	4	.0017	.0207	-.1793		
		1							
			3	4	-.0026	-.0310	.2689		
			4	4	-.0019	-.0231	.2004		
2D 5/2	2D 5/2	0						
			0	0	.0002	-.0009	-.0015	-.0400	.3060
			2	2	-.0008	-.0007	-.0146	.1716	
			4	4	.0029	.0063	.1630		
		1							
			1	0	.0001	-.0006	-.0010	-.0273	.2091
			1	2	.0004	.0004	.0085	-.0991	
			3	2	-.0009	-.0008	-.0166	.1945	
			3	4	-.0010	-.0021	-.0551		
			5	4	.0064	.0140	.3645		
2D 5/2	2D 3/2	0						
			2	2	-.0005	-.0005	-.0104	.1213	
			4	4	.0057	.0125	.3260		
		1							
			1	0	-.0002	.0010	.0015	.0413	-.3160
			1	2	.0006	.0006	.0112	-.1310	
			2	2	-.0011	-.0011	-.0211	.2476	
			3	2	.0007	.0007	.0128	-.1497	
			3	4	-.0025	-.0055	-.1432		
			4	4	.0064	.0140	.3645		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

2D	5/2	3S	1/2	0						
					2	2	-.0004	.0030	.0051	.3002
				1						
					2	2	-.0003	.0024	.0042	.2451
					3	2	-.0005	.0038	.0066	.3876
2D	3/2	2D	3/2	0						
					0	0	.0001	-.0008	-.0012	-.0327	.2499
					2	2	-.0006	-.0006	-.0112	.1310
				1						
					1	0	-.0001	.0003	.0005	.0146	-.1117
					1	2	-.0008	-.0008	-.0158	.1853
					3	2	.0001	.0001	.0028	-.0324
					3	4	.0058	.0127	.3307	
2D	3/2	3S	1/2	0						
					2	2	.0003	-.0024	-.0042	-.2451
				1						
					1	2	-.0005	.0038	.0066	.3876
					2	2	-.0004	.0030	.0051	.3002
3S	1/2	3S	1/2	0						
					0	0	.0002	.0005	.0063	.0202	.3092
				1						
					1	0	.0002	.0005	.0063	.0202	.3092

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

NN1= 4 NN2= 5

N L J	N L J	S	J	L	G(1)	G(2)	G(3)	G(4)	G(5)	G(6)	G(7)
		MASS=140 NU= .193									
1G 9/2	1H11/2	0									
			1	1	.0001	-.0013	.0107	-.0422	.0648		
			3	3	-.0007	.0070	-.0303	.0495			
			5	5	.0056	-.0318	.0592				
			7	7	-.0388	.0959					
			9	9	.2197						
		1									
			1	1	-.0001	.0009	-.0076	.0298	-.0458		
			2	1	.0000	-.0009	.0071	-.0278	.0427		
			2	3	.0004	-.0039	.0167	-.0273			
			3	3	.0002	-.0020	.0088	-.0143			
			4	3	-.0006	.0066	-.0287	.0468			
			4	5	-.0025	.0142	-.0265				
			5	5	-.0010	.0058	-.0108				
			6	5	.0069	-.0393	.0731				
			6	7	.0133	-.0328					
			7	7	.0052	-.0128					
			8	7	-.0664	.1642					
			8	9	-.0502						
			9	9	-.0232						
			10	9	.6913						
1G 9/2	1H 9/2	0									
			1	1	.0000	-.0002	.0015	-.0057	.0088		
			3	3	-.0002	.0024	-.0106	.0173			
			5	5	.0034	-.0195	.0362				
			7	7	-.0395	.0977					
			9	9	.4661						
		1									
			0	1	-.0001	.0018	-.0146	.0571	-.0878		
			1	1	.0001	-.0013	.0103	-.0406	.0624		
			2	1	-.0000	.0006	-.0045	.0178	-.0273		
			2	3	.0006	-.0060	.0261	-.0427			
			3	3	-.0007	.0070	-.0306	.0500			
			4	3	.0004	-.0037	.0162	-.0265			
			4	5	-.0044	.0251	-.0468				
			5	5	.0063	-.0355	.0662				
			6	5	-.0031	.0176	-.0328				
			6	7	.0296	-.0731					
			7	7	-.0528	.1305					
			8	7	.0203	-.0502					
			8	9	-.1642						
			9	9	.4913						
1G 9/2	2F 7/2	0									
			1	1	-.0001	.0006	.0041	-.0528	.1372		
			3	3	.0006	.0011	-.0342	.1036			
			5	5	-.0023	-.0258	.1202				
			7	7	.0042	.1784					
		1									
			1	1	-.0001	.0004	.0029	-.0373	.0971		
			2	1	-.0001	.0004	.0028	-.0362	.0942		
			2	3	-.0003	-.0006	.0176	-.0535			
			3	3	.0002	.0003	-.0099	.0299			
			4	3	.0006	.0012	-.0356	.1078			
			4	5	.0009	.0101	-.0469				

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				5	5	-.0004	-.0047	.0219	
				6	5	-.0034	-.0387	.1801	
				6	7	-.0011	-.0458		
				7	7	.0006	.0238		
				8	7	.0119	.5008		
1G	9/2	2F	5/2	0					
				3	3	.0002	.0005	-.0139	.0423
				5	5	-.0019	-.0211	.0981	
				7	7	.0078	.3278		
				1					
				2	1	.0001	-.0006	-.0042	.0535 -.1392
				2	3	-.0002	-.0004	.0119	-.0362
				3	3	.0005	.0011	-.0322	.0977
				4	3	-.0004	-.0009	.0279	-.0846
				4	5	.0011	.0129	-.0598	
				5	5	-.0027	-.0308	.1434	
				6	5	.0016	.0179	-.0832	
				6	7	-.0024	-.0992		
				7	7	.0083	.3505		
1G	9/2	3P	3/2	0					
				3	3	.0004	-.0027	-.0297	.1718
				5	5	-.0022	-.0055	.1532	
				1					
				3	3	.0004	-.0023	-.0257	.1488
				4	3	.0004	-.0022	-.0251	.1451
				4	5	.0005	.0013	-.0373	
				5	5	-.0012	-.0030	.0839	
				6	5	-.0046	-.0116	.3251	
1G	9/2	3P	1/2	0					
				5	5	-.0027	-.0067	.1877	
				1					
				4	3	-.0004	.0027	.0302	-.1750
				4	5	.0004	.0011	-.0309	
				5	5	-.0029	-.0074	.2056	
1G	7/2	1H	11/2	0					
				3	3	.0002	-.0022	.0097	-.0158
				5	5	-.0033	.0188	-.0350	
				7	7	.0388	-.0959		
				9	9	-.4609			
				1					
				2	1	.0001	-.0014	.0111	-.0436 .0670
				2	3	-.0002	.0025	-.0107	.0174
				3	3	-.0006	.0064	-.0280	.0457
				4	3	-.0006	.0059	-.0256	.0419
				4	5	.0028	-.0159	.0296	
				5	5	.0061	-.0343	.0639	
				6	5	.0043	-.0241	.0449	
				6	7	-.0216	.0535		
				7	7	-.0518	.1281		
				8	7	-.0258	.0637		
				8	9	.1296			
				9	9	.4858			
1G	7/2	1H	9/2	0					
				1	1	.0001	-.0012	.0097	-.0381 .0585
				3	3	-.0006	.0062	-.0271	.0442
				5	5	.0049	-.0275	.0513	
				7	7	-.0308	.0761		
				1					
				1	1	.0000	-.0008	.0069	-.0269 .0414
				2	1	-.0000	.0005	-.0042	.0166 -.0256
				2	3	-.0006	.0064	-.0279	.0456
				3	3	-.0002	.0018	-.0078	.0128

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			4	3	.0002	-.0025	.0108	-.0177
			4	5	.0067	-.0376	.0700	
			5	5	.0009	-.0050	.0094	
			6	5	-.0015	.0082	-.0154	
			6	7	-.0632	.1563		
			7	7	-.0041	.0102		
			8	7	.0051	-.0126		
			8	9	.6570			
1G	7/2	2F 7/2	0					
			1	1	.0000	-.0001	-.0007	.0089	-.0232
			3	3	-.0002	-.0005	.0153	-.0463	
			5	5	.0019	.0218	-.1016		
			7	7	-.0079	-.3338			
			1						
			0	1	-.0001	.0008	.0055	-.0708	.1841
			1	1	-.0001	.0006	.0040	-.0504	.1312
			2	1	-.0000	.0003	.0017	-.0218	.0568
			2	3	.0005	.0010	-.0293	.0887	
			3	3	.0006	.0012	-.0353	.1070	
			4	3	.0003	.0006	-.0176	.0535	
			4	5	-.0018	-.0203	.0946		
			5	5	-.0028	-.0319	.1484		
			6	5	-.0012	-.0131	.0609		
			6	7	.0032	.1355			
			7	7	.0085	.3569			
1G	7/2	2F 5/2	0					
			1	1	-.0001	.0006	.0036	-.0463	.1205
			3	3	.0005	.0010	-.0293	.0887	
			5	5	-.0018	-.0203	.0946		
			1						
			1	1	.0001	-.0004	-.0026	.0328	-.0852
			2	1	.0000	-.0002	-.0015	.0189	-.0492
			2	3	.0005	.0011	-.0338	.1024	
			3	3	-.0001	-.0003	.0084	-.0256	
			4	3	-.0002	-.0003	.0099	-.0299	
			4	5	-.0032	-.0364	.1692		
			5	5	.0003	.0037	-.0173		
			6	5	.0003	.0038	-.0176		
			6	7	.0112	.4695			
1G	7/2	3P 3/2	0					
			3	3	-.0002	.0012	.0133	-.0768	
			5	5	.0031	.0078	-.2167		
			1						
			2	3	.0006	-.0036	-.0398	.2305	
			3	3	.0003	-.0021	-.0230	.1331	
			4	3	.0001	-.0005	-.0057	.0331	
			4	5	-.0023	-.0059	.1637		
			5	5	-.0034	-.0085	.2374		
1G	7/2	3P 1/2	0					
			3	3	.0003	-.0021	-.0230	.1331	
			1						
			3	3	-.0003	.0018	.0199	-.1153	
			4	3	-.0000	.0003	.0034	-.0196	
			4	5	-.0039	-.0099	.2766		
2D	5/2	1H11/2	0						
			3	3	.0001	.0048	-.0475	.1210	
			5	5	.0007	-.0336	.1174		
			7	7	-.0120	.1677			
			1						
			3	3	-.0001	-.0042	.0411	-.1048	
			4	3	.0001	.0034	-.0338	.0860	
			4	5	-.0002	.0107	-.0374		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			5	5	-.0004	.0184	-.0643	
			6	5	.0010	-.0443	.1545	
			6	7	.0028	-.0393		
			7	7	.0048	-.0672		
			8	7	-.0314	.4398		
2D 5/2	1H 9/2	0						
			3	3	.0000	.0015	-.0150	.0383
			5	5	.0006	-.0254	.0888	
			7	7	-.0212	.2965		
		1						
			2	3	-.0002	-.0065	.0643	-.1638
			3	3	.0001	.0035	-.0347	.0884
			4	3	-.0000	-.0010	.0100	-.0255
			4	5	-.0008	.0362	-.1262	
			5	5	.0008	-.0371	.1297	
			6	5	-.0002	.0108	-.0376	
			6	7	.0115	-.1615		
			7	7	-.0226	.3170		
2D 5/2	2F 7/2	0						
			1	1	.0002	-.0005	-.0013	-.0454 .2557
			3	3	-.0008	-.0014	-.0207	.1882
			5	5	.0030	.0072	.2006	
		1						
			1	1	-.0001	.0003	.0009	.0321 -.1808
			2	1	.0001	-.0003	-.0009	-.0333 .1879
			2	3	.0004	.0007	.0096	-.0869
			3	3	.0002	.0004	.0060	-.0543
			4	3	-.0010	-.0018	-.0256	.2326
			4	5	-.0009	-.0021	-.0598	
			5	5	-.0006	-.0013	-.0366	
			6	5	.0073	.0174	.4846	
2D 5/2	2F 5/2	0						
			1	1	.0000	-.0001	-.0003	-.0101 .0572
			3	3	-.0005	-.0009	-.0131	.1190
			5	5	.0048	.0114	.3172	
		1						
			0	1	-.0002	.0006	.0017	.0600 -.3383
			1	1	.0002	-.0004	-.0012	-.0430 .2426
			2	1	-.0001	.0002	.0005	.0181 -.1023
			2	3	.0007	.0012	.0176	-.1597
			3	3	-.0009	-.0016	-.0227	.2062
			4	3	.0004	.0007	.0098	-.0887
			4	5	-.0024	-.0056	-.1568	
			5	5	.0052	.0124	.3475	
2D 5/2	3P 3/2	0						
			1	1	-.0001	-.0008	-.0007	-.0095 .3209
			3	3	.0001	.0027	.0103	.2187
		1						
			1	1	-.0001	-.0005	-.0005	-.0067 .2269
			2	1	-.0001	-.0006	-.0006	-.0079 .2685
			2	3	-.0000	-.0010	-.0038	-.0798
			3	3	.0000	.0008	.0030	.0631
			4	3	.0002	.0051	.0200	.4235
2D 5/2	3P 1/2	0						
			3	3	.0001	.0030	.0115	.2445
		1						
			2	1	.0001	.0007	.0006	.0085 -.2870
			2	3	-.0000	-.0009	-.0035	-.0747
			3	3	.0001	.0034	.0133	.2823
2D 3/2	1H11/2	0						
			5	5	-.0005	.0220	-.0769	
			7	7	.0198	-.2782		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			1					
			4	3	.0001	.0054	-.0530	.1350
			4	5	.0002	-.0068	.0239	
			5	5	.0007	-.0322	.1123	
			6	5	.0007	-.0295	.1030	
			6	7	-.0042	.0590		
			7	7	-.0212	.2974		
2D	3/2	1H 9/2	0					
			3	3	.0001	.0041	-.0407	.1036
			5	5	.0006	-.0265	.0924	
			1					
			3	3	.0001	.0036	-.0352	.0897
			4	3	-.0000	-.0009	.0094	-.0239
			4	5	.0009	-.0387	.1350	
			5	5	.0003	-.0145	.0506	
			6	5	-.0001	.0043	-.0151	
			6	7	-.0288	.4029		
2D	3/2	2F 7/2	0					
			3	3	.0005	.0008	.0119	-.1087
			5	5	-.0046	-.0110	-.3065	
			1					
			2	1	.0002	-.0005	-.0013	-.0445 .2506
			2	3	-.0003	-.0005	-.0072	.0652
			3	3	-.0008	-.0014	-.0207	.1882
			4	3	-.0006	-.0011	-.0154	.1403
			4	5	.0015	.0036	.0992	
			5	5	.0051	.0120	.3357	
2D	3/2	2F 5/2	0					
			1	1	.0002	-.0004	-.0011	-.0380 .2140
			3	3	-.0006	-.0011	-.0160	.1458
			1					
			1	1	.0001	-.0003	-.0008	-.0268 .1513
			2	1	-.0001	.0001	.0004	.0136 -.0767
			2	3	-.0009	-.0016	-.0234	.2129
			3	3	-.0002	-.0003	-.0046	.0421
			4	3	.0001	.0002	.0034	-.0314
			4	5	.0067	.0159	.4436	
2D	3/2	3P 3/2	0					
			1	1	.0000	.0003	.0002	.0032 -.1070
			3	3	-.0001	-.0033	-.0126	-.2678
			1					
			0	1	-.0001	-.0010	-.0009	-.0123 .4143
			1	1	-.0001	-.0007	-.0007	-.0089 .3026
			2	1	-.0000	-.0003	-.0003	-.0035 .1172
			2	3	.0001	.0022	.0086	.1830
			3	3	.0001	.0038	.0146	.3093
2D	3/2	3P 1/2	0					
			1	1	-.0001	-.0006	-.0005	-.0071 .2392
			1					
			1	1	.0001	.0004	.0004	.0050 -.1691
			2	1	.0000	.0001	.0001	.0017 -.0586
			2	3	.0002	.0044	.0172	.3659
3S	1/2	1H11/2	0					
			5	5	-.0004	-.0294	.1640	
			1					
			5	5	.0004	.0268	-.1497	
			6	5	-.0005	-.0398	.2221	
3S	1/2	1H 9/2	0					
			5	5	-.0004	-.0268	.1497	
			1					
			4	5	.0005	.0398	-.2221	
			5	5	-.0004	-.0294	.1640	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

3S 1/2	2F 7/2	0						
			3	3	-.0006	.0011	-.0039	.2490
		1						
			3	3	.0005	-.0009	.0034	-.2156
			4	3	-.0008	.0014	-.0052	.3294
3S 1/2	2F 5/2	0						
			3	3	-.0005	.0009	-.0034	.2156
		1						
			2	3	.0008	-.0014	.0052	-.3294
			3	3	-.0006	.0011	-.0039	.2490
3S 1/2	3P 3/2	0						
			1	1	.0001	.0003	.0051	.0187 .3164
		1						
			1	1	-.0001	-.0002	-.0036	-.0132 -.2238
			2	1	.0001	.0004	.0063	.0229 .3876
3S 1/2	3P 1/2	0						
			1	1	.0001	.0002	.0036	.0132 .2238
		1						
			0	1	-.0001	-.0004	-.0063	-.0229 -.3876
			1	1	.0001	.0003	.0051	.0187 .3164

MASS=182 NU= .176

1G 9/2	1H11/2	0						
			1	1	.0002	-.0029	.0182	-.0546 .0642
			3	3	-.0015	.0118	-.0392	.0490
			5	5	.0095	-.0411	.0586	
			7	7	-.0502	.0949		
			9	9	.2174			
		1						
			1	1	-.0001	.0021	-.0128	.0386 -.0454
			2	1	.0001	-.0019	.0120	-.0359 .0422
			2	3	.0008	-.0065	.0217	-.0271
			3	3	.0004	-.0034	.0113	-.0141
			4	3	-.0014	.0111	-.0371	.0463
			4	5	-.0043	.0184	-.0262	
			5	5	-.0017	.0075	-.0107	
			6	5	.0117	-.0508	.0723	
			6	7	.0172	-.0325		
			7	7	.0067	-.0127		
			8	7	-.0859	.1625		
			8	9	-.0497			
			9	9	-.0229			
			10	9	.6841			
1G 9/2	1H 9/2	0						
			1	1	.0000	-.0004	.0025	-.0074 .0087
			3	3	-.0005	.0041	-.0137	.0171
			5	5	.0058	-.0252	.0359	
			7	7	-.0511	.0966		
			9	9	.4612			
		1						
			0	1	-.0003	.0039	-.0246	.0739 -.0869
			1	1	.0002	-.0028	.0175	-.0525 .0617
			2	1	-.0001	.0012	-.0077	.0230 -.0271
			2	3	.0013	-.0102	.0338	-.0422
			3	3	-.0015	.0119	-.0396	.0495
			4	3	.0008	-.0063	.0210	-.0262
			4	5	-.0075	.0325	-.0463	
			5	5	.0106	-.0460	.0655	
			6	5	-.0053	.0228	-.0325	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				6	7	.0382	-.0723		
				7	7	-.0683	.1291		
				8	7	.0263	-.0497		
				8	9	-.1625			
				9	9	.4862			
1G	9/2	2F	7/2	0					
				1	1	-.0003	.0014	.0070	-.0682	.1358
				3	3	.0012	.0019	-.0442	.1025	
				5	5	-.0039	-.0334	.1189		
				7	7	.0055	.1766			
				1						
				1	1	-.0002	.0010	.0049	-.0483	.0960
				2	1	-.0002	.0010	.0048	-.0469	.0933
				2	3	-.0006	-.0010	.0228	-.0529	
				3	3	.0004	.0005	-.0128	.0296	
				4	3	.0013	.0020	-.0460	.1067	
				4	5	.0015	.0130	-.0464		
				5	5	-.0007	-.0061	.0217		
				6	5	-.0058	-.0500	.1782		
				6	7	-.0014	-.0453			
				7	7	.0007	.0236			
				8	7	.0154	.4955			
1G	9/2	2F	5/2	0					
				3	3	.0005	.0008	-.0180	.0419	
				5	5	-.0032	-.0273	.0971		
				7	7	.0101	.3244			
				1						
				2	1	.0003	-.0014	-.0071	.0692	-.1377
				2	3	-.0004	-.0007	.0155	-.0358	
				3	3	.0011	.0018	-.0417	.0967	
				4	3	-.0010	-.0015	.0361	-.0837	
				4	5	.0019	.0166	-.0592		
				5	5	-.0046	-.0398	.1419		
				6	5	.0027	.0231	-.0823		
				6	7	-.0031	-.0982			
				7	7	.0108	.3468			
1G	9/2	3P	3/2	0					
				3	3	.0009	-.0045	-.0384	.1700	
				5	5	-.0037	-.0071	.1516		
				1						
				3	3	.0008	-.0039	-.0332	.1472	
				4	3	.0008	-.0038	-.0324	.1436	
				4	5	.0009	.0017	-.0369		
				5	5	-.0020	-.0039	.0831		
				6	5	-.0078	-.0151	.3217		
1G	9/2	3P	1/2	0						
				5	5	-.0045	-.0087	.1857		
				1						
				4	3	-.0009	.0046	.0391	-.1731	
				4	5	.0007	.0014	-.0306		
				5	5	-.0049	-.0095	.2034		
1G	7/2	1H	11/2	0						
				3	3	.0005	-.0038	.0125	-.0157	
				5	5	-.0056	.0243	-.0346		
				7	7	.0502	-.0949			
				9	9	-.4561				
				1						
				2	1	.0002	-.0030	.0188	-.0563	.0663
				2	3	-.0005	.0042	-.0138	.0172	
				3	3	-.0014	.0109	-.0362	.0452	
				4	3	-.0013	.0100	-.0332	.0414	
				4	5	.0048	-.0206	.0293		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			5	5	.0103	-.0444	.0633	
			6	5	.0072	-.0312	.0444	
			6	7	-.0280	.0529		
			7	7	-.0670	.1268		
			8	7	-.0333	.0630		
			8	9	.1282			
			9	9	.4807			
1G 7/2	1H 9/2	0						
			1	1	.0002	-.0026	.0164	-.0492	.0579
			3	3	-.0013	.0105	-.0350	.0437	
			5	5	.0082	-.0356	.0507	
			7	7	-.0398	.0753		
		1						
			1	1	.0001	-.0019	.0116	-.0348	.0410
			2	1	-.0001	.0011	-.0072	.0215	-.0253
			2	3	-.0014	.0109	-.0361	.0451	
			3	3	-.0004	.0030	-.0101	.0126	
			4	3	.0005	-.0042	.0140	-.0175	
			4	5	.0112	-.0487	.0693	
			5	5	.0015	-.0065	.0093	
			6	5	-.0025	.0107	-.0152	
			6	7	-.0818	.1547		
			7	7	-.0053	.0101		
			8	7	.0066	-.0124		
			8	9	.6501			
1G 7/2	2F 7/2	0						
			1	1	.0000	-.0002	-.0012	.0115	-.0230
			3	3	-.0005	-.0008	.0198	-.0458	
			5	5	.0033	.0282	-.1005	
			7	7	-.0103	-.3303		
		1						
			0	1	-.0004	.0019	.0094	-.0916	.1822
			1	1	-.0003	.0013	.0067	-.0653	.1299
			2	1	-.0001	.0006	.0029	-.0283	.0562
			2	3	.0010	.0016	-.0378	.0878	
			3	3	.0013	.0020	-.0456	.1059	
			4	3	.0006	.0010	-.0228	.0529	
			4	5	-.0030	-.0263	.0936	
			5	5	-.0048	-.0412	.1468	
			6	5	-.0020	-.0169	.0602	
			6	7	.0042	.1341		
			7	7	.0110	.3532		
1G 7/2	2F 5/2	0						
			1	1	-.0002	.0012	.0061	-.0599	.1193
			3	3	.0010	.0016	-.0378	.0878	
			5	5	-.0030	-.0263	.0936	
		1						
			1	1	.0002	-.0009	-.0043	.0424	-.0844
			2	1	.0001	-.0005	-.0025	.0245	-.0487
			2	3	.0012	.0019	-.0437	.1014	
			3	3	-.0003	-.0005	.0109	-.0253	
			4	3	-.0004	-.0005	.0128	-.0296	
			4	5	-.0054	-.0470	.1674	
			5	5	.0006	.0048	-.0171	
			6	5	.0006	.0049	-.0174	
			6	7	.0144	.4646		
1G 7/2	3P 3/2	0						
			3	3	-.0004	.0020	.0172	-.0760	
			5	5	.0052	.0100	-.2144	
		1						
			2	3	.0012	-.0060	-.0515	.2281	
			3	3	.0007	-.0035	-.0297	.1317	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			4	3	.0002	-.0009	-.0074	.0327
			4	5	-.0039	-.0076	.1620	
			5	5	-.0057	-.0110	.2349	
1G	7/2	3P 1/2	0					
			3	3	.0007	-.0035	-.0297	.1317
			1					
			3	3	-.0006	.0030	.0258	-.1140
			4	3	-.0001	.0005	.0044	-.0194
			4	5	-.0066	-.0128	.2737	
2D	5/2	1H11/2	0					
			3	3	.0003	.0081	-.0614	.1197
			5	5	.0013	-.0435	.1162	
			7	7	-.0155	.1660		
			1					
			3	3	-.0002	-.0070	.0532	-.1037
			4	3	.0002	.0058	-.0437	.0851
			4	5	-.0004	.0139	-.0370	
			5	5	-.0007	.0238	-.0637	
			6	5	.0017	-.0573	.1529	
			6	7	.0036	-.0389		
			7	7	.0062	-.0665		
			8	7	-.0406	.4352		
2D	5/2	1H 9/2	0					
			3	3	.0001	.0026	-.0194	.0379
			5	5	.0010	-.0329	.0879	
			7	7	-.0274	.2934		
			1					
			2	3	-.0004	-.0110	.0832	-.1621
			3	3	.0002	.0059	-.0449	.0874
			4	3	-.0001	-.0017	.0130	-.0252
			4	5	-.0014	.0468	-.1249	
			5	5	.0014	-.0481	.1283	
			6	5	-.0004	.0139	-.0372	
			6	7	.0149	-.1598		
			7	7	-.0293	.3137		
2D	5/2	2F 7/2	0					
			1	1	.0005	-.0010	-.0022	-.0587	.2531
			3	3	-.0017	-.0024	-.0268	.1862	
			5	5	.0051	.0093	.1985	
			1					
			1	1	-.0004	.0007	.0015	.0415	-.1789
			2	1	.0004	-.0008	-.0016	-.0431	.1860
			2	3	.0008	.0011	.0124	-.0860	
			3	3	.0005	.0007	.0077	-.0538	
			4	3	-.0021	-.0030	-.0331	.2302	
			4	5	-.0015	-.0028	-.0592		
			5	5	-.0009	-.0017	-.0362		
			6	5	.0124	.0224	.4795		
2D	5/2	2F 5/2	0					
			1	1	.0001	-.0002	-.0005	-.0131	.0566
			3	3	-.0011	-.0015	-.0169	.1178	
			5	5	.0081	.0147	.3139		
			1					
			0	1	-.0007	.0014	.0029	.0776	-.3348
			1	1	.0005	-.0010	-.0021	-.0557	.2401
			2	1	-.0002	.0004	.0009	.0235	-.1012
			2	3	.0015	.0020	.0227	-.1580	
			3	3	-.0019	-.0026	-.0293	.2040	
			4	3	.0008	.0011	.0126	-.0878	
			4	5	-.0040	-.0073	-.1552		
			5	5	.0089	.0161	.3439		
2D	5/2	3P 3/2	0					

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				1	1	-.0003	-.0017	-.0012	-.0123	.3176
				3	3	.0002	.0045	.0133	.2164	
			1							
				1	1	-.0002	-.0012	-.0009	-.0087	.2246
				2	1	-.0002	-.0014	-.0010	-.0103	.2657
				2	3	-.0001	-.0016	-.0049	-.0790	
				3	3	.0001	.0013	.0038	.0625	
				4	3	.0004	.0087	.0258	.4190	
2D	5/2	3P 1/2	0							
				3	3	.0002	.0050	.0149	.2419	
			1							
				2	1	.0003	.0015	.0011	.0110	-.2840
				2	3	-.0001	-.0015	-.0046	-.0739	
				3	3	.0003	.0058	.0172	.2794	
2D	3/2	1H11/2	0							
				5	5	-.0008	.0285	-.0761		
				7	7	.0257	-.2753			
			1							
				4	3	.0003	.0091	-.0685	.1336	
				4	5	.0003	-.0088	.0236		
				5	5	.0012	-.0416	.1111		
				6	5	.0011	-.0382	.1019		
				6	7	-.0054	.0584			
				7	7	-.0274	.2943			
2D	3/2	1H 9/2	0							
				3	3	.0002	.0070	-.0526	.1025	
				5	5	.0010	-.0342	.0914		
			1							
				3	3	.0002	.0060	-.0456	.0888	
				4	3	-.0001	-.0016	.0121	-.0236	
				4	5	.0014	-.0500	.1336		
				5	5	.0005	-.0188	.0501		
				6	5	-.0002	.0056	-.0149		
				6	7	-.0372	.3987			
2D	3/2	2F 7/2	0							
				3	3	.0010	.0014	.0155	-.1075	
				5	5	-.0078	-.0142	-.3033		
			1							
				2	1	.0005	-.0010	-.0021	-.0575	.2479
				2	3	-.0006	-.0008	-.0093	.0645	
				3	3	-.0017	-.0024	-.0268	.1862	
				4	3	-.0013	-.0018	-.0199	.1388	
				4	5	.0025	.0046	.0982		
				5	5	.0086	.0156	.3322		
2D	3/2	2F 5/2	0							
				1	1	.0004	-.0009	-.0018	-.0491	.2117
				3	3	-.0013	-.0019	-.0207	.1443	
			1							
				1	1	.0003	-.0006	-.0013	-.0347	.1497
				2	1	-.0002	.0003	.0007	.0176	-.0759
				2	3	-.0020	-.0027	-.0303	.2107	
				3	3	-.0004	-.0005	-.0060	.0416	
				4	3	.0003	.0004	.0045	-.0310	
				4	5	.0113	.0205	.4390		
2D	3/2	3P 3/2	0							
				1	1	.0001	.0006	.0004	.0041	-.1059
				3	3	-.0003	-.0055	-.0163	-.2650	
			1							
				0	1	-.0004	-.0022	-.0016	-.0158	.4100
				1	1	-.0003	-.0016	-.0011	-.0116	.2994
				2	1	-.0001	-.0006	-.0004	-.0045	.1160
				2	3	.0002	.0038	.0111	.1810	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				3	3	.0003	.0064	.0188	.3060	
2D	3/2	3P	1/2	0						
					1	1	-.0002	-.0012	-.0009	-.0091	.2367
				1							
					1	1	.0001	.0009	.0006	.0065	-.1674
					2	1	.0001	.0003	.0002	.0022	-.0580
					2	3	.0004	.0075	.0223	.3621	
3S	1/2	1H	11/2	0							
					5	5	-.0007	-.0380	.1623		
				1							
					5	5	.0006	.0347	-.1481		
					6	5	-.0009	-.0514	.2197		
3S	1/2	1H	9/2	0							
					5	5	-.0006	-.0347	.1481		
				1							
					4	5	.0009	.0514	-.2197		
					5	5	-.0007	-.0380	.1623		
3S	1/2	2F	7/2	0							
					3	3	-.0013	.0018	-.0051	.2464	
				1							
					3	3	.0012	-.0016	.0044	-.2134	
					4	3	-.0018	.0024	-.0067	.3259	
3S	1/2	2F	5/2	0							
					3	3	-.0012	.0016	-.0044	.2134	
				1							
					2	3	.0018	-.0024	.0067	-.3259	
					3	3	-.0013	.0018	-.0051	.2464	
3S	1/2	3P	3/2	0							
					1	1	.0003	.0007	.0087	.0242	.3131
				1							
					1	1	-.0002	-.0005	-.0061	-.0171	-.2214
					2	1	.0003	.0009	.0106	.0296	.3835
3S	1/2	3P	1/2	0							
					1	1	.0002	.0005	.0061	.0171	.2214
				1							
					0	1	-.0003	-.0009	-.0106	-.0296	-.3835
					1	1	.0003	.0007	.0087	.0242	.3131

MASS=224 NU= .165

1G	9/2	1H	11/2	0						
					1	1	.0004	-.0048	.0252	-.0639	.0635
					3	3	-.0025	.0163	-.0459	.0485	
					5	5	.0132	-.0482	.0580		
					7	7	-.0587	.0939			
					9	9	.2152				
				1							
					1	1	-.0003	.0034	-.0178	.0452	-.0449
					2	1	.0003	-.0031	.0166	-.0421	.0418
					2	3	.0014	-.0090	.0254	-.0268	
					3	3	.0007	-.0047	.0133	-.0140	
					4	3	-.0023	.0154	-.0434	.0458	
					4	5	-.0059	.0215	-.0259		
					5	5	-.0024	.0088	-.0106		
					6	5	.0163	-.0595	.0716		
					6	7	.0201	-.0322			
					7	7	.0079	-.0126			
					8	7	-.1006	.1609			
					8	9	-.0492				
					9	9	-.0227				

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			10	9	.6771			
1G 9/2	1H 9/2	0						
			1	1	.0001	-.0006	.0034	-.0087	.0086
			3	3	-.0009	.0057	-.0161	.0170	
			5	5	.0081	-.0295	.0355		
			7	7	-.0598	.0956			
			9	9	.4565				
		1							
			0	1	-.0005	.0065	-.0341	.0865	-.0860
			1	1	.0004	-.0046	.0242	-.0615	.0611
			2	1	-.0002	.0020	-.0106	.0269	-.0268
			2	3	.0021	-.0141	.0396	-.0418	
			3	3	-.0025	.0165	-.0464	.0490	
			4	3	.0013	-.0087	.0246	-.0259	
			4	5	-.0104	.0381	-.0458		
			5	5	.0147	-.0539	.0648		
			6	5	-.0073	.0267	-.0322		
			6	7	.0448	-.0716			
			7	7	-.0799	.1278			
			8	7	.0308	-.0492			
			8	9	-.1609				
			9	9	.4812				
1G 9/2	2F 7/2	0							
			1	1	-.0005	.0023	.0097	-.0799	.1344
			3	3	.0020	.0026	-.0518	.1015	
			5	5	-.0054	-.0391	.1177		
			7	7	.0064	.1748			
		1							
			1	1	-.0004	.0016	.0069	-.0565	.0951
			2	1	-.0004	.0016	.0067	-.0549	.0923
			2	3	-.0010	-.0014	.0267	-.0524	
			3	3	.0006	.0008	-.0149	.0293	
			4	3	.0021	.0027	-.0539	.1056	
			4	5	.0021	.0153	-.0460		
			5	5	-.0010	-.0071	.0215		
			6	5	-.0080	-.0586	.1763		
			6	7	-.0017	-.0449			
			7	7	.0009	.0234			
			8	7	.0180	.4905			
1G 9/2	2F 5/2	0							
			3	3	.0008	.0011	-.0211	.0414	
			5	5	-.0044	-.0320	.0961		
			7	7	.0118	.3211			
		1							
			2	1	.0006	-.0023	-.0098	.0811	-.1363
			2	3	-.0007	-.0009	.0181	-.0355	
			3	3	.0019	.0025	-.0488	.0957	
			4	3	-.0016	-.0021	.0423	-.0829	
			4	5	.0027	.0195	-.0586		
			5	5	-.0064	-.0467	.1404		
			6	5	.0037	.0271	-.0815		
			6	7	-.0036	-.0972			
			7	7	.0126	.3432			
1G 9/2	3P 3/2	0							
			3	3	.0015	-.0062	-.0450	.1683	
			5	5	-.0051	-.0083	.1501		
		1							
			3	3	.0013	-.0054	-.0389	.1457	
			4	3	.0013	-.0052	-.0380	.1421	
			4	5	.0012	.0020	-.0365		
			5	5	-.0028	-.0046	.0822		
			6	5	-.0108	-.0176	.3184		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

1G 9/2	3P 1/2	0						
			5	5	-.0062	-.0102	.1838	
		1						
			4	3	-.0015	.0063	.0458	-.1714
			4	5	.0010	.0017	-.0303	
			5	5	-.0068	-.0112	.2014	
1G 7/2	1H11/2	0						
			3	3	.0008	-.0052	.0147	-.0155
			5	5	-.0078	.0285	-.0343	
			7	7	.0587	-.0939		
			9	9	-.4514			
		1						
			2	1	.0004	-.0049	.0260	-.0660 .0656
			2	3	-.0009	.0058	-.0162	.0171
			3	3	-.0023	.0151	-.0424	.0447
			4	3	-.0021	.0138	-.0388	.0410
			4	5	.0066	-.0241	.0290	
			5	5	.0142	-.0520	.0626	
			6	5	.0100	-.0365	.0439	
			6	7	-.0328	.0524		
			7	7	-.0785	.1255		
			8	7	-.0390	.0624		
			8	9	.1269			
			9	9	.4758			
1G 7/2	1H 9/2	0						
			1	1	.0004	-.0043	.0227	-.0577 .0573
			3	3	-.0022	.0146	-.0410	.0433
			5	5	.0114	-.0417	.0502	
			7	7	-.0466	.0745		
		1						
			1	1	.0003	-.0030	.0161	-.0408 .0405
			2	1	-.0002	.0019	-.0099	.0252 -.0250
			2	3	-.0023	.0151	-.0423	.0447
			3	3	-.0006	.0042	-.0118	.0125
			4	3	.0009	-.0058	.0164	-.0173
			4	5	.0156	-.0570	.0686	
			5	5	.0021	-.0076	.0092	
			6	5	-.0034	.0125	-.0150	
			6	7	-.0958	.1531		
			7	7	-.0062	.0100		
			8	7	.0077	-.0123		
			8	9	.6435			
1G 7/2	2F 7/2	0						
			1	1	.0001	-.0004	-.0016	.0135 -.0227
			3	3	-.0009	-.0012	.0232	-.0454
			5	5	.0045	.0331	-.0995	
			7	7	-.0120	-.3270		
		1						
			0	1	-.0007	.0031	.0130	-.1072 .1804
			1	1	-.0005	.0022	.0093	-.0764 .1285
			2	1	-.0002	.0009	.0040	-.0331 .0557
			2	3	.0017	.0023	-.0443	.0869
			3	3	.0021	.0027	-.0535	.1048
			4	3	.0010	.0014	-.0267	.0524
			4	5	-.0042	-.0308	.0926	
			5	5	-.0066	-.0483	.1453	
			6	5	-.0027	-.0198	.0596	
			6	7	.0049	.1328		
			7	7	.0129	.3495		
1G 7/2	2F 5/2	0						
			1	1	-.0005	.0020	.0085	-.0702 .1181
			3	3	.0017	.0023	-.0443	.0869

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			5	5	-.0042	-.0308	.0926	
		1						
			1	1	.0003	-.0014	-.0060	.0496	-.0835
			2	1	.0002	-.0008	-.0035	.0287	-.0482
			2	3	.0020	.0026	-.0512	.1003	
			3	3	-.0005	-.0007	.0128	-.0251	
			4	3	-.0006	-.0008	.0149	-.0293	
			4	5	-.0075	-.0551	.1657		
			5	5	.0008	.0056	-.0169		
			6	5	.0008	.0057	-.0172		
			6	7	.0169	.4599			
1G	7/2	3P 3/2	0					
			3	3	-.0007	.0028	.0201	-.0753	
			5	5	.0072	.0118	-.2122		
		1						
			2	3	.0020	-.0083	-.0603	.2258	
			3	3	.0012	-.0048	-.0348	.1303	
			4	3	.0003	-.0012	-.0087	.0324	
			4	5	-.0054	-.0089	.1603		
			5	5	-.0079	-.0129	.2325		
1G	7/2	3P 1/2	0					
			3	3	.0012	-.0048	-.0348	.1303	
		1						
			3	3	-.0010	.0042	.0302	-.1129	
			4	3	-.0002	.0007	.0051	-.0192	
			4	5	-.0092	-.0150	.2709		
2D	5/2	1H11/2	0					
			3	3	.0005	.0113	-.0720	.1185	
			5	5	.0017	-.0510	.1150		
			7	7	-.0181	.1643			
		1						
			3	3	-.0004	-.0098	.0623	-.1026	
			4	3	.0003	.0080	-.0512	.0843	
			4	5	-.0006	.0162	-.0367		
			5	5	-.0010	.0279	-.0630		
			6	5	.0023	-.0671	.1513		
			6	7	.0043	-.0385			
			7	7	.0073	-.0659			
			8	7	-.0476	.4308			
2D	5/2	1H 9/2	0					
			3	3	.0001	.0036	-.0228	.0375	
			5	5	.0013	-.0385	.0870		
			7	7	-.0321	.2904			
		1						
			2	3	-.0006	-.0153	.0974	-.1604	
			3	3	.0003	.0082	-.0526	.0865	
			4	3	-.0001	-.0024	.0152	-.0250	
			4	5	-.0019	.0548	-.1237		
			5	5	.0019	-.0563	.1270		
			6	5	-.0006	.0163	-.0368		
			6	7	.0175	-.1582			
			7	7	-.0343	.3105			
2D	5/2	2F 7/2	0					
			1	1	.0010	-.0017	-.0030	-.0687	.2505
			3	3	-.0028	-.0033	-.0313	.1843	
			5	5	.0071	.0109	.1965		
		1						
			1	1	-.0007	.0012	.0021	.0486	-.1771
			2	1	.0007	-.0013	-.0022	-.0505	.1841
			2	3	.0013	.0015	.0145	-.0851	
			3	3	.0008	.0010	.0090	-.0532	
			4	3	-.0035	-.0041	-.0387	.2278	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				4	5	-.0021	-.0032	-.0586	
				5	5	-.0013	-.0020	-.0359	
				6	5	.0171	.0263	.4746	
2D	5/2	2F	5/2	0					
				1	1	.0002	-.0004	-.0007	-.0154	.0560
				3	3	-.0018	-.0021	-.0198	.1166	
				5	5	.0112	.0172	.3107		
			1							
				0	1	-.0013	.0023	.0040	.0909	-.3313
				1	1	.0010	-.0016	-.0029	-.0652	.2376
				2	1	-.0004	.0007	.0012	.0275	-.1002
				2	3	.0024	.0028	.0266	-.1564	
				3	3	-.0031	-.0036	-.0343	.2019	
				4	3	.0013	.0016	.0148	-.0869	
				4	5	-.0055	-.0085	-.1536		
				5	5	.0123	.0189	.3404		
2D	5/2	3P	3/2	0					
				1	1	-.0005	-.0027	-.0017	-.0144	.3143
				3	3	.0004	.0062	.0156	.2142	
			1							
				1	1	-.0004	-.0019	-.0012	-.0102	.2223
				2	1	-.0005	-.0023	-.0014	-.0120	.2630
				2	3	-.0001	-.0023	-.0057	-.0782	
				3	3	.0001	.0018	.0045	.0618	
				4	3	.0007	.0121	.0302	.4148	
2D	5/2	3P	1/2	0					
				3	3	.0004	.0070	.0175	.2395	
			1							
				2	1	.0005	.0025	.0015	.0129	-.2811
				2	3	-.0001	-.0021	-.0053	-.0732	
				3	3	.0005	.0080	.0202	.2765	
2D	3/2	1H	11/2	0					
				5	5	-.0011	.0334	-.0753		
				7	7	.0301	-.2724			
			1							
				4	3	.0005	.0126	-.0803	.1322	
				4	5	.0004	-.0104	.0234		
				5	5	.0017	-.0487	.1100		
				6	5	.0015	-.0447	.1009		
				6	7	-.0064	.0578			
				7	7	-.0321	.2913			
2D	3/2	1H	9/2	0					
				3	3	.0004	.0096	-.0616	.1015	
				5	5	.0014	-.0401	.0905		
			1							
				3	3	.0003	.0084	-.0534	.0879	
				4	3	-.0001	-.0022	.0142	-.0234	
				4	5	.0020	-.0586	.1322		
				5	5	.0008	-.0220	.0496		
				6	5	-.0002	.0065	-.0148		
				6	7	-.0436	.3946			
2D	3/2	2F	7/2	0					
				3	3	.0016	.0019	.0181	-.1064	
				5	5	-.0108	-.0166	-.3002		
			1							
				2	1	.0010	-.0017	-.0029	-.0674	.2454
				2	3	-.0010	-.0012	-.0109	.0639	
				3	3	-.0028	-.0033	-.0313	.1843	
				4	3	-.0021	-.0025	-.0234	.1374	
				4	5	.0035	.0054	.0972		
				5	5	.0119	.0182	.3288		
2D	3/2	2F	5/2	0						

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				1	1	.0008	-.0014	-.0025	-.0575	.2096
				3	3	-.0022	-.0026	-.0243	.1428	
			1							
				1	1	.0006	-.0010	-.0018	-.0407	.1482
				2	1	-.0003	.0005	.0009	.0206	-.0751
				2	3	-.0032	-.0038	-.0355	.2086	
				3	3	-.0006	-.0007	-.0070	.0412	
				4	3	.0005	.0006	.0052	-.0307	
				4	5	.0157	.0241	.4345		
2D	3/2	3P	3/2	0						
				1	1	.0002	.0009	.0006	.0048	-.1048
				3	3	-.0004	-.0076	-.0191	-.2623	
			1							
				0	1	-.0007	-.0035	-.0022	-.0186	.4058
				1	1	-.0005	-.0026	-.0016	-.0136	.2964
				2	1	-.0002	-.0010	-.0006	-.0053	.1148
				2	3	.0003	.0052	.0131	.1792	
				3	3	.0005	.0088	.0221	.3029	
2D	3/2	3P	1/2	0						
				1	1	-.0004	-.0020	-.0013	-.0107	.2343
			1							
				1	1	.0003	.0014	.0009	.0076	-.1657
				2	1	.0001	.0005	.0003	.0026	-.0574
				2	3	.0006	.0104	.0261	.3584	
3S	1/2	1H	11/2	0						
				5	5	-.0009	-.0445	.1606		
			1							
				5	5	.0009	.0406	-.1466		
				6	5	-.0013	-.0602	.2175		
3S	1/2	1H	9/2	0						
				5	5	-.0009	-.0406	.1466		
			1							
				4	5	.0013	.0602	-.2175		
				5	5	-.0009	-.0445	.1606		
3S	1/2	2F	7/2	0						
				3	3	-.0022	.0025	-.0059	.2439	
			1							
				3	3	.0019	-.0022	.0051	-.2112	
				4	3	-.0029	.0033	-.0078	.3226	
3S	1/2	2F	5/2	0						
				3	3	-.0019	.0022	-.0051	.2112	
			1							
				2	3	.0029	-.0033	.0078	-.3226	
				3	3	-.0022	.0025	-.0059	.2439	
3S	1/2	3P	3/2	0						
				1	1	.0005	.0012	.0120	.0284	.3099
			1							
				1	1	-.0004	-.0008	-.0085	-.0200	-.2192
				2	1	.0007	.0014	.0147	.0347	.3796
3S	1/2	3P	1/2	0						
				1	1	.0004	.0008	.0085	.0200	.2192
			1							
				0	1	-.0007	-.0014	-.0147	-.0347	-.3796
				1	1	.0005	.0012	.0120	.0284	.3099

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

NN1= 5 NN2= 5

N L J	N L J	S	J	L	G(1)	G(2)	G(3)	G(4)	G(5)	G(6)	G(7)
		MASS=140 NU= .193									
1H11/2	1H11/2	0									
			0	0	-.0000	.0001	-.0015	.0098	-.0333	.0459	
			2	2	.0000	-.0007	.0052	-.0183	.0259		
			4	4	-.0005	.0043	-.0170	.0259			
			6	6	.0038	-.0198	.0346				
			8	8	-.0259	.0605					
			10	10	.1474						
		1									
			1	0	-.0000	.0001	-.0009	.0062	-.0209	.0288	
			1	2	-.0000	.0005	-.0036	.0126	-.0178		
			3	2	.0000	-.0006	.0044	-.0155	.0219		
			3	4	.0002	-.0023	.0091	-.0138			
			5	4	-.0005	.0045	-.0179	.0272			
			5	6	-.0016	.0084	-.0147				
			7	6	.0050	-.0263	.0460				
			7	8	.0084	-.0198					
			9	8	-.0471	.1101					
			9	10	-.0322						
			11	10	.4889						
1H11/2	1H 9/2	0									
			2	2	.0000	-.0002	.0016	-.0056	.0080		
			4	4	-.0003	.0025	-.0102	.0155			
			6	6	.0036	-.0191	.0334				
			8	8	-.0401	.0937					
			10	10	.4661						
		1									
			1	0	.0000	-.0001	.0016	-.0108	.0367	-.0505	
			1	2	-.0000	.0006	-.0041	.0144	-.0203		
			2	2	.0001	-.0010	.0071	-.0253	.0358		
			3	2	-.0000	.0007	-.0052	.0184	-.0261		
			3	4	.0004	-.0038	.0153	-.0232			
			4	4	-.0007	.0063	-.0250	.0380			
			5	4	.0004	-.0041	.0165	-.0250			
			5	6	-.0035	.0183	-.0320				
			6	6	.0062	-.0324	.0567				
			7	6	-.0035	.0183	-.0319				
			7	8	.0243	-.0569					
			8	8	-.0519	.1215					
			9	8	.0217	-.0507					
			9	10	-.1402						
			10	10	.4888						
1H11/2	2F 7/2	0									
			2	2	-.0001	.0001	.0059	-.0441	.0954		
			4	4	.0003	.0027	-.0320	.0810			
			6	6	-.0007	-.0275	.1021				
			8	8	-.0036	.1619					
		1									
			2	2	-.0001	.0001	.0048	-.0360	.0779		
			3	2	-.0000	.0001	.0039	-.0293	.0635		
			3	4	-.0001	-.0011	.0137	-.0347			
			4	4	.0001	.0012	-.0143	.0362			
			5	4	.0003	.0029	-.0342	.0867			
			5	6	.0002	.0096	-.0355				
			6	6	-.0002	-.0085	.0315				

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			7	6	-.0010	-.0428	.1591			
			7	8	.0009	-.0382				
			8	8	-.0009	.0382				
			9	8	-.0107	.4735				
1H11/2	2F 5/2	0								
			4	4	.0001	.0012	-.0143	.0362		
			6	6	-.0006	-.0238	.0884			
			8	8	-.0070	.3100				
		1								
			3	2	.0001	-.0001	-.0065	.0488	-.1056	
			3	4	-.0001	-.0007	.0082	-.0209		
			4	4	.0003	.0024	-.0288	.0729		
			5	4	-.0003	-.0024	.0289	-.0731		
			5	6	.0003	.0113	-.0421			
			6	6	-.0008	-.0330	.1228			
			7	6	.0005	.0208	-.0772			
			7	8	.0018	-.0787				
			8	8	-.0074	.3288				
1H11/2	3P 3/2	0								
			4	4	.0004	-.0001	-.0344	.1386		
			6	6	-.0014	-.0134	.1326			
		1								
			4	4	.0003	-.0001	-.0308	.1240		
			5	4	.0003	-.0001	-.0290	.1167		
			5	6	.0003	.0028	-.0276			
			6	6	-.0009	-.0083	.0818			
			7	6	-.0031	-.0291	.2879			
1H11/2	3P 1/2	0								
			6	6	-.0018	-.0168	.1662			
		1								
			5	4	-.0004	.0001	.0360	-.1448		
			5	6	.0002	.0022	-.0222			
			6	6	-.0019	-.0181	.1796			
1H 9/2	1H 9/2	0								
			0	0	-.0000	.0001	-.0013	.0090	-.0304	.0419
			2	2	.0000	-.0006	.0047	-.0166	.0235	
			4	4	-.0004	.0038	-.0153	.0232		
			6	6	.0033	-.0172	.0300			
			8	8	-.0206	.0481				
		1								
			1	0	.0000	-.0001	.0007	-.0047	.0159	-.0219
			1	2	.0000	-.0006	.0047	-.0166	.0235	
			3	2	-.0000	.0003	-.0022	.0080	-.0113	
			3	4	-.0005	.0044	-.0176	.0268		
			5	4	.0002	-.0015	.0059	-.0090		
			5	6	.0048	-.0254	.0444			
			7	6	-.0009	.0049	-.0086			
			7	8	-.0451	.1055				
			9	8	.0032	-.0076				
			9	10	.4673					
1H 9/2	2F 7/2	0								
			2	2	.0000	-.0000	-.0013	.0096	-.0208	
			4	4	-.0001	-.0014	.0162	-.0411		
			6	6	.0006	.0251	-.0932			
			8	8	.0072	-.3192				
		1								
			1	2	-.0001	.0001	.0079	-.0598	.1292	
			2	2	-.0001	.0001	.0047	-.0354	.0765	
			3	2	-.0000	.0000	.0017	-.0126	.0273	
			3	4	.0003	.0027	-.0319	.0808		
			4	4	.0003	.0027	-.0326	.0827		
			5	4	.0001	.0011	-.0134	.0339		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			5	6	-.0006	-.0245	.0910			
			6	6	-.0008	-.0348	.1294			
			7	6	-.0003	-.0120	.0446			
			7	8	-.0031	.1362				
			8	8	-.0076	.3386				
1H	9/2	2F 5/2	0							
			2	2	-.0001	.0001	.0052	-.0391	.0846	
			4	4	.0002	.0023	-.0276	.0698		
			6	6	-.0005	-.0217	.0807			
			1							
			2	2	.0000	-.0001	-.0042	.0319	-.0691	
			3	2	.0000	-.0000	-.0017	.0129	-.0278	
			3	4	.0003	.0026	-.0313	.0792		
			4	4	-.0001	-.0010	.0123	-.0312		
			5	4	-.0001	-.0007	.0082	-.0207		
			5	6	-.0009	-.0400	.1487			
			6	6	.0002	.0067	-.0249			
			7	6	.0001	.0037	-.0136			
			7	8	-.0100	.4450				
1H	9/2	3P 3/2	0							
			4	4	-.0002	.0001	.0162	-.0653		
			6	6	.0021	.0196	-.1941			
			1							
			3	4	.0005	-.0002	-.0466	.1877		
			4	4	.0003	-.0001	-.0254	.1023		
			5	4	.0001	-.0000	-.0054	.0216		
			5	6	-.0016	-.0151	.1492			
			6	6	-.0022	-.0212	.2097			
1H	9/2	3P 1/2	0							
			4	4	.0003	-.0001	-.0269	.1084		
			1							
			4	4	-.0003	.0001	.0241	-.0969		
			5	4	-.0000	.0000	.0033	-.0132		
			5	6	-.0026	-.0246	.2437			
2F	7/2	2F 7/2	0							
			0	0	-.0000	.0002	-.0001	.0008	-.0517	.2059
			2	2	.0001	-.0002	-.0002	-.0249	.1146	
			4	4	-.0005	-.0008	-.0145	.1099		
			6	6	.0022	.0044	.1306			
			1							
			1	0	-.0000	.0001	-.0001	.0005	-.0339	.1348
			1	2	-.0001	.0001	.0001	.0158	-.0725	
			3	2	.0001	-.0002	-.0002	-.0242	.1112	
			3	4	.0002	.0004	.0063	-.0480		
			5	4	-.0007	-.0012	-.0203	.1542		
			5	6	-.0006	-.0012	-.0365			
			7	6	.0057	.0116	.3456			
2F	7/2	2F 5/2	0							
			2	2	.0000	-.0001	-.0001	-.0122	.0561	
			4	4	-.0005	-.0009	-.0152	.1158		
			6	6	.0053	.0108	.3199			
			1							
			1	0	.0000	-.0002	.0001	-.0009	.0553	-.2201
			1	2	-.0001	.0001	.0001	.0193	-.0887	
			2	2	.0001	-.0002	-.0002	-.0349	.1604	
			3	2	-.0001	.0002	.0002	.0238	-.1095	
			3	4	.0005	.0007	.0128	-.0974		
			4	4	-.0008	-.0014	-.0239	.1813		
			5	4	.0004	.0007	.0123	-.0937		
			5	6	-.0020	-.0040	-.1200			
			6	6	.0057	.0116	.3456			
2F	7/2	3P 3/2	0							

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				2	2	.0000	-.0008	-.0009	-.0206	.2525	
				4	4	-.0002	.0018	.0028	.1921		
			1								
				2	2	.0000	-.0006	-.0008	-.0168	.2062	
				3	2	.0000	-.0006	-.0008	-.0174	.2134	
				3	4	.0001	-.0005	-.0008	-.0562		
				4	4	-.0001	.0008	.0013	.0859		
				5	4	-.0004	.0037	.0058	.3937		
2F	7/2	3P	1/2	0							
				4	4	-.0002	.0021	.0033	.2273		
			1								
				3	2	-.0000	.0007	.0009	.0201	-.2464	
				3	4	.0001	-.0005	-.0007	-.0487		
				4	4	-.0003	.0024	.0037	.2541		
2F	5/2	2F	5/2	0							
				0	0	-.0000	.0002	-.0001	.0007	-.0448	.1783
				2	2	.0001	-.0002	-.0001	-.0212	.0972	
				4	4	-.0004	-.0007	-.0113	.0859		
			1								
				1	0	.0000	-.0001	.0001	-.0003	.0219	-.0870
				1	2	.0001	-.0002	-.0002	-.0244	.1122	
				3	2	-.0000	.0001	.0001	.0080	-.0367	
				3	4	-.0007	-.0011	-.0191	.1452		
				5	4	.0001	.0001	.0023	-.0175		
				5	6	.0053	.0108	.3220			
2F	5/2	3P	3/2	0							
				2	2	-.0000	.0003	.0004	.0084	-.1031	
				4	4	.0003	-.0024	-.0038	-.2577		
			1								
				1	2	.0000	-.0010	-.0012	-.0273	.3340	
				2	2	.0000	-.0006	-.0008	-.0172	.2104	
				3	2	.0000	-.0002	-.0002	-.0052	.0636	
				3	4	-.0002	.0018	.0028	.1886		
				4	4	-.0003	.0027	.0042	.2881		
2F	5/2	3P	1/2	0							
				2	2	.0000	-.0006	-.0007	-.0157	.1929	
			1								
				2	2	-.0000	.0005	.0006	.0128	-.1575	
				3	2	-.0000	.0001	.0001	.0029	-.0356	
				3	4	-.0004	.0031	.0049	.3374		
3P	3/2	3P	3/2	0							
				0	0	-.0000	-.0000	-.0004	.0027	.0043	.3276
				2	2	.0001	.0002	.0029	.0091	.1670	
			1								
				1	0	-.0000	-.0000	-.0003	.0020	.0032	.2442
				1	2	-.0000	-.0001	-.0014	-.0043	-.0787	
				3	2	.0001	.0003	.0050	.0157	.2893	
3P	3/2	3P	1/2	0							
				2	2	.0001	.0002	.0041	.0128	.2362	
			1								
				1	0	.0000	.0000	.0004	-.0025	-.0041	-.3088
				1	2	-.0000	-.0001	-.0021	-.0068	-.1245	
				2	2	.0001	.0003	.0050	.0157	.2893	
3P	1/2	3P	1/2	0							
				0	0	-.0000	-.0000	-.0003	.0019	.0031	.2316
			1								
				1	0	.0000	.0000	.0001	-.0006	-.0010	-.0772
				1	2	.0001	.0002	.0043	.0135	.2490	

MASS=182 NU= .176

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

1H11/2	1H11/2	0							
			0	0	-.0000	.0003	-.0032	.0166	-.0431	.0454
			2	2	.0001	-.0016	.0087	-.0237	.0256	
			4	4	-.0010	.0072	-.0220	.0256		
			6	6	.0063	-.0256	.0342			
			8	8	-.0334	.0599				
			10	10	.1459					
		1								
			1	0	-.0000	.0002	-.0020	.0104	-.0271	.0285
			1	2	-.0001	.0011	-.0060	.0163	-.0177	
			3	2	.0001	-.0013	.0074	-.0200	.0216	
			3	4	.0005	-.0038	.0118	-.0137		
			5	4	-.0011	.0076	-.0231	.0269		
			5	6	-.0027	.0109	-.0146			
			7	6	.0085	-.0340	.0455			
			7	8	.0109	-.0195				
			9	8	-.0609	.1090				
			9	10	-.0319					
			11	10	.4838					
1H11/2	1H 9/2	0								
			2	2	.0000	-.0005	.0027	-.0073	.0079	
			4	4	-.0006	.0043	-.0132	.0153		
			6	6	.0061	-.0247	.0330			
			8	8	-.0518	.0927				
			10	10	.4612					
		1								
			1	0	.0000	-.0004	.0036	-.0183	.0475	-.0499
			1	2	-.0001	.0012	-.0069	.0186	-.0201	
			2	2	.0002	-.0022	.0121	-.0328	.0355	
			3	2	-.0001	.0016	-.0088	.0238	-.0258	
			3	4	.0009	-.0064	.0197	-.0229		
			4	4	-.0015	.0106	-.0323	.0376		
			5	4	.0010	-.0070	.0213	-.0247		
			5	6	-.0059	.0237	-.0317			
			6	6	.0104	-.0419	.0561			
			7	6	-.0059	.0236	-.0316			
			7	8	.0315	-.0563				
			8	8	-.0672	.1202				
			9	8	.0280	-.0501				
			9	10	-.1387					
			10	10	.4837					
1H11/2	2F 7/2	0								
			2	2	-.0002	.0002	.0099	-.0571	.0944	
			4	4	.0006	.0045	-.0414	.0802		
			6	6	-.0011	-.0355	.1010			
			8	8	-.0047	.1602				
		1								
			2	2	-.0002	.0002	.0081	-.0466	.0771	
			3	2	-.0001	.0001	.0066	-.0380	.0628	
			3	4	-.0003	-.0019	.0177	-.0344		
			4	4	.0003	.0020	-.0185	.0359		
			5	4	.0007	.0048	-.0443	.0858		
			5	6	.0004	.0124	-.0352			
			6	6	-.0003	-.0110	.0312			
			7	6	-.0017	-.0554	.1574			
			7	8	.0011	-.0378				
			8	8	-.0011	.0378				
			9	8	-.0138	.4686				
1H11/2	2F 5/2	0								
			4	4	.0003	.0020	-.0185	.0359		
			6	6	-.0010	-.0308	.0875			

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			8	8	-.0090	.3067				
		1								
			3	2	.0002	-.0002	-.0109	.0632	-.1045	
			3	4	-.0002	-.0012	.0107	-.0207		
			4	4	.0006	.0041	-.0372	.0722		
			5	4	-.0006	-.0041	.0373	-.0724		
			5	6	.0005	.0147	-.0417			
			6	6	-.0013	-.0427	.1215			
			7	6	.0008	.0269	-.0764			
			7	8	.0023	-.0778				
			8	8	-.0096	.3253				
1H11/2	3P 3/2	0								
			4	4	.0008	-.0002	-.0446	.1372		
			6	6	-.0024	-.0173	.1312			
		1								
			4	4	.0007	-.0002	-.0399	.1227		
			5	4	.0007	-.0002	-.0375	.1155		
			5	6	.0005	.0036	-.0273			
			6	6	-.0015	-.0107	.0810			
			7	6	-.0052	-.0376	.2849			
1H11/2	3P 1/2	0								
			6	6	-.0030	-.0217	.1645			
		1								
			5	4	-.0008	.0002	.0465	-.1433		
			5	6	.0004	.0029	-.0220			
			6	6	-.0032	-.0234	.1777			
1H 9/2	1H 9/2	0								
			0	0	-.0000	.0003	-.0030	.0151	-.0394	.0414
			2	2	.0001	-.0014	.0079	-.0215	.0233	
			4	4	-.0009	.0064	-.0197	.0229		
			6	6	.0055	-.0222	.0297			
			8	8	-.0266	.0476				
		1								
			1	0	.0000	-.0002	.0015	-.0079	.0206	-.0216
			1	2	.0001	-.0014	.0079	-.0215	.0233	
			3	2	-.0001	.0007	-.0038	.0103	-.0112	
			3	4	-.0011	.0074	-.0228	.0265		
			5	4	.0004	-.0025	.0077	-.0089		
			5	6	.0081	-.0328	.0439			
			7	6	-.0016	.0064	-.0085			
			7	8	-.0583	.1044				
			9	8	.0042	-.0075				
			9	10	.4624					
1H 9/2	2F 7/2	0								
			2	2	.0000	-.0000	-.0022	.0125	-.0206	
			4	4	-.0003	-.0023	.0210	-.0407		
			6	6	.0010	.0324	-.0922			
			8	8	.0093	-.3159				
		1								
			1	2	-.0003	.0003	.0134	-.0773	.1279	
			2	2	-.0002	.0002	.0079	-.0458	.0757	
			3	2	-.0001	.0001	.0028	-.0163	.0270	
			3	4	.0006	.0045	-.0413	.0800		
			4	4	.0007	.0046	-.0422	.0818		
			5	4	.0003	.0019	-.0173	.0335		
			5	6	-.0010	-.0317	.0901			
			6	6	-.0014	-.0450	.1281			
			7	6	-.0005	-.0155	.0441			
			7	8	-.0040	.1348				
			8	8	-.0099	.3351				
1H 9/2	2F 5/2	0								
			2	2	-.0002	.0002	.0088	-.0506	.0837	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				4	4	.0006	.0039	-.0357	.0691	
				6	6	-.0009	-.0281	.0799		
			1							
				2	2	.0001	-.0002	-.0072	.0413	-.0683
				3	2	.0001	-.0001	-.0029	.0166	-.0275
				3	4	.0006	.0044	-.0404	.0784	
				4	4	-.0002	-.0017	.0159	-.0309	
				5	4	-.0002	-.0012	.0106	-.0205	
				5	6	-.0016	-.0518	.1471		
				6	6	.0003	.0087	-.0246		
				7	6	.0001	.0047	-.0135		
				7	8	-.0130	.4403			
1H	9/2	3P	3/2	0						
				4	4	-.0004	.0001	.0210	-.0647	
				6	6	.0035	.0253	-.1921		
			1							
				3	4	.0011	-.0003	-.0603	.1857	
				4	4	.0006	-.0001	-.0329	.1012	
				5	4	.0001	-.0000	-.0069	.0214	
				5	6	-.0027	-.0195	.1477		
				6	6	-.0038	-.0274	.2075		
1H	9/2	3P	1/2	0						
				4	4	.0006	-.0002	-.0348	.1072	
			1							
				4	4	-.0006	.0001	.0312	-.0959	
				5	4	-.0001	.0000	.0042	-.0131	
				5	6	-.0044	-.0318	.2411		
2F	7/2	2F	7/2	0						
				0	0	-.0001	.0005	-.0003	.0014	-.0669	.2038
				2	2	.0003	-.0004	-.0003	-.0322	.1134	
				4	4	-.0011	-.0014	-.0187	.1088	
				6	6	.0037	.0057	.1293		
			1							
				1	0	-.0000	.0003	-.0002	.0009	-.0438	.1334
				1	2	-.0002	.0002	.0002	.0204	-.0717	
				3	2	.0003	-.0004	-.0003	-.0313	.1101	
				3	4	.0005	.0006	.0082	-.0475	
				5	4	-.0016	-.0020	-.0263	.1526	
				5	6	-.0010	-.0016	-.0361		
				7	6	.0097	.0150	.3420		
2F	7/2	2F	5/2	0						
				2	2	.0001	-.0002	-.0001	-.0158	.0555	
				4	4	-.0012	-.0015	-.0197	.1146	
				6	6	.0090	.0139	.3166		
			1							
				1	0	.0001	-.0005	.0003	-.0014	.0715	-.2178
				1	2	-.0002	.0003	.0002	.0250	-.0878	
				2	2	.0004	-.0005	-.0004	-.0451	.1587	
				3	2	-.0003	.0004	.0003	.0308	-.1084	
				3	4	.0010	.0013	.0166	-.0964	
				4	4	-.0019	-.0023	-.0309	.1794	
				5	4	.0010	.0012	.0159	-.0927	
				5	6	-.0034	-.0052	-.1187		
				6	6	.0097	.0150	.3419		
2F	7/2	3P	3/2	0						
				2	2	.0000	-.0017	-.0016	-.0267	.2499	
				4	4	-.0005	.0030	.0036	.1901	
			1							
				2	2	.0000	-.0014	-.0013	-.0218	.2040	
				3	2	.0000	-.0014	-.0013	-.0225	.2112	
				3	4	.0001	-.0009	-.0011	-.0556	
				4	4	-.0002	.0013	.0016	.0850	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			5	4	-.0009	.0062	.0074	.3895	
2F 7/2	3P 1/2	0							
			4	4	-.0005	.0036	.0043	.2249	
		1							
			3	2	-.0000	.0016	.0015	.0260	-.2438
			3	4	.0001	-.0008	-.0009	-.0482	
			4	4	-.0006	.0040	.0048	.2515	
2F 5/2	2F 5/2	0							
			0	0	-.0001	.0004	-.0002	.0012	-.0580 .1765
			2	2	.0002	-.0003	-.0002	-.0274	.0962
			4	4	-.0009	-.0011	-.0146	.0850	
		1							
			1	0	.0000	-.0002	.0001	-.0006	.0283 -.0861
			1	2	.0003	-.0004	-.0003	-.0316	.1111
			3	2	-.0001	.0001	.0001	.0103	-.0364
			3	4	-.0015	-.0019	-.0247	.1437	
			5	4	.0002	.0002	.0030	-.0173	
			5	6	.0090	.0140	.3187		
2F 5/2	3P 3/2	0							
			2	2	-.0000	.0007	.0006	.0109	-.1020
			4	4	.0006	-.0040	-.0049	-.2550	
		1							
			1	2	.0000	-.0022	-.0021	-.0353	.3305
			2	2	.0000	-.0014	-.0013	-.0222	.2082
			3	2	.0000	-.0004	-.0004	-.0067	.0630
			3	4	-.0005	.0030	.0036	.1867	
			4	4	-.0007	.0045	.0054	.2851	
2F 5/2	3P 1/2	0							
			2	2	.0000	-.0013	-.0012	-.0204	.1908
		1							
			2	2	-.0000	.0010	.0010	.0166	-.1558
			3	2	-.0000	.0002	.0002	.0038	-.0352
			3	4	-.0008	.0053	.0064	.3339	
3P 3/2	3P 3/2	0							
			0	0	-.0001	-.0000	-.0009	.0045	.0056 .3242
			2	2	.0002	.0003	.0049	.0118	.1653
		1							
			1	0	-.0001	-.0000	-.0007	.0034	.0042 .2416
			1	2	-.0001	-.0002	-.0023	-.0055	-.0779
			3	2	.0003	.0006	.0084	.0204	.2863
3P 3/2	3P 1/2	0							
			2	2	.0003	.0005	.0069	.0166	.2337
		1							
			1	0	.0001	.0000	.0008	-.0043	-.0053 -.3056
			1	2	-.0001	-.0003	-.0036	-.0088	-.1232
			2	2	.0003	.0006	.0084	.0204	.2863
3P 1/2	3P 1/2	0							
			0	0	-.0001	-.0000	-.0006	.0032	.0040 .2292
		1							
			1	0	.0000	.0000	.0002	-.0011	-.0013 -.0764
			1	2	.0003	.0005	.0072	.0175	.2464

MASS=224 NU= .165

1H11/2	1H11/2	0							
			0	0	-.0000	.0006	-.0053	.0230	-.0505 .0449
			2	2	.0003	-.0026	.0121	-.0277	.0253
			4	4	-.0017	.0100	-.0258	.0253	
			6	6	.0088	-.0299	.0339		
			8	8	-.0392	.0592			

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			10	10	.1444				
		1							
			1	0	-.0000	.0004	-.0033	.0144	-.0317	.0282
			1	2	-.0002	.0018	-.0083	.0191	-.0175	
			3	2	.0002	-.0022	.0102	-.0234	.0214	
			3	4	.0009	-.0053	.0138	-.0135		
			5	4	-.0018	.0105	-.0271	.0266		
			5	6	-.0038	.0128	-.0144			
			7	6	.0117	-.0399	.0451			
			7	8	.0128	-.0193				
			9	8	-.0713	.1079				
			9	10	-.0316					
			11	10	.4789					
1H11/2	1H 9/2	0								
			2	2	.0001	-.0008	.0037	-.0086	.0078	
			4	4	-.0010	.0060	-.0154	.0151		
			6	6	.0085	-.0289	.0327			
			8	8	-.0607	.0918				
			10	10	.4565					
		1								
			1	0	.0000	-.0007	.0059	-.0253	.0556	-.0494
			1	2	-.0002	.0020	-.0095	.0218	-.0199	
			2	2	.0004	-.0036	.0167	-.0384	.0351	
			3	2	-.0003	.0026	-.0122	.0279	-.0255	
			3	4	.0015	-.0089	.0231	-.0227		
			4	4	-.0025	.0147	-.0379	.0372		
			5	4	.0016	-.0096	.0249	-.0245		
			5	6	-.0082	.0277	-.0314			
			6	6	.0144	-.0491	.0555			
			7	6	-.0081	.0277	-.0313			
			7	8	.0369	-.0558				
			8	8	-.0787	.1190				
			9	8	.0328	-.0496				
			9	10	-.1373					
			10	10	.4788					
1H11/2	2F 7/2	0								
			2	2	-.0004	.0004	.0137	-.0669	.0935	
			4	4	.0010	.0062	-.0485	.0794		
			6	6	-.0015	-.0416	.1000			
			8	8	-.0055	.1586				
		1								
			2	2	-.0003	.0003	.0112	-.0546	.0763	
			3	2	-.0002	.0002	.0091	-.0445	.0622	
			3	4	-.0004	-.0027	.0208	-.0340		
			4	4	.0005	.0028	-.0217	.0355		
			5	4	.0011	.0067	-.0519	.0850		
			5	6	.0005	.0145	-.0348			
			6	6	-.0005	-.0128	.0309			
			7	6	-.0024	-.0649	.1558			
			7	8	.0013	-.0374				
			8	8	-.0013	.0374				
			9	8	-.0161	.4638				
1H11/2	2F 5/2	0								
			4	4	.0005	.0028	-.0217	.0355		
			6	6	-.0013	-.0360	.0866			
			8	8	-.0106	.3036				
		1								
			3	2	.0004	-.0004	-.0152	.0740	-.1034	
			3	4	-.0003	-.0016	.0125	-.0204		
			4	4	.0009	.0056	-.0436	.0714		
			5	4	-.0009	-.0056	.0437	-.0716		
			5	6	.0006	.0172	-.0413			

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			6	6	-.0018	-.0501	.1202		
			7	6	.0012	.0315	-.0756		
			7	8	.0027	-.0770			
			8	8	-.0112	.3220			
1H11/2	3P 3/2	0							
			4	4	.0013	-.0003	-.0522	.1358	
			6	6	-.0033	-.0203	.1299		
		1							
			4	4	.0012	-.0002	-.0467	.1214	
			5	4	.0011	-.0002	-.0439	.1143	
			5	6	.0007	.0042	-.0270		
			6	6	-.0020	-.0125	.0802		
			7	6	-.0072	-.0440	.2820		
1H11/2	3P 1/2	0							
			6	6	-.0041	-.0254	.1628		
		1							
			5	4	-.0014	.0003	.0545	-.1418	
			5	6	.0006	.0034	-.0218		
			6	6	-.0045	-.0275	.1759		
1H 9/2	1H 9/2	0							
			0	0	-.0000	.0006	-.0049	.0210	-.0461	.0410
			2	2	.0002	-.0024	.0110	-.0252	.0230	
			4	4	-.0015	.0089	-.0231	.0227		
			6	6	.0076	-.0260	.0294			
			8	8	-.0312	.0471				
		1							
			1	0	.0000	-.0003	.0025	-.0110	.0241	-.0214
			1	2	.0002	-.0024	.0110	-.0252	.0230	
			3	2	-.0001	.0011	-.0053	.0121	-.0111	
			3	4	-.0017	.0103	-.0267	.0262		
			5	4	.0006	-.0035	.0090	-.0088		
			5	6	.0113	-.0384	.0435			
			7	6	-.0022	.0075	-.0084			
			7	8	-.0683	.1033				
			9	8	.0049	-.0074				
			9	10	.4577					
1H 9/2	2F 7/2	0							
			2	2	.0001	-.0001	-.0030	.0146	-.0204	
			4	4	-.0005	-.0032	.0246	-.0403		
			6	6	.0014	.0380	-.0913			
			8	8	.0109	-.3127				
		1							
			1	2	-.0005	.0005	.0186	-.0905	.1266	
			2	2	-.0003	.0003	.0110	-.0536	.0749	
			3	2	-.0001	.0001	.0039	-.0191	.0267	
			3	4	.0010	.0062	-.0483	.0792		
			4	4	.0011	.0064	-.0495	.0810		
			5	4	.0004	.0026	-.0202	.0332		
			5	6	-.0014	-.0371	.0892			
			6	6	-.0019	-.0528	.1268			
			7	6	-.0007	-.0182	.0436			
			7	8	-.0046	.1334				
			8	8	-.0115	.3316				
1H 9/2	2F 5/2	0							
			2	2	-.0003	.0003	.0122	-.0593	.0829	
			4	4	.0009	.0054	-.0418	.0684		
			6	6	-.0012	-.0329	.0790			
		1							
			2	2	.0003	-.0003	-.0099	.0484	-.0676	
			3	2	.0001	-.0001	-.0040	.0195	-.0273	
			3	4	.0010	.0061	-.0474	.0776		
			4	4	-.0004	-.0024	.0187	-.0306		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			5	4	-.0003	-.0016	.0124	-.0203		
			5	6	-.0022	-.0606	.1456			
			6	6	.0004	.0102	-.0244			
			7	6	.0002	.0056	-.0134			
			7	8	-.0152	.4358				
1H	9/2	3P 3/2	0							
			4	4	-.0006	.0001	.0246	-.0640		
			6	6	.0048	.0297	-.1901			
			1							
			3	4	.0018	-.0004	-.0707	.1838		
			4	4	.0010	-.0002	-.0385	.1002		
			5	4	.0002	-.0000	-.0081	.0211		
			5	6	-.0037	-.0228	.1462			
			6	6	-.0052	-.0321	.2054			
1H	9/2	3P 1/2	0							
			4	4	.0010	-.0002	-.0408	.1061		
			1							
			4	4	-.0009	.0002	.0365	-.0949		
			5	4	-.0001	.0000	.0050	-.0129		
			5	6	-.0061	-.0373	.2387			
2F	7/2	2F 7/2	0							
			0	0	-.0002	.0010	-.0004	.0019	-.0784	.2017
			2	2	.0006	-.0006	-.0004	-.0378	.1122	
			4	4	-.0019	-.0020	-.0219	.1076		
			6	6	.0051	.0067	.1279			
			1							
			1	0	-.0001	.0006	-.0003	.0012	-.0513	.1320
			1	2	-.0004	.0004	.0002	.0239	-.0710	
			3	2	.0006	-.0006	-.0004	-.0367	.1089	
			3	4	.0008	.0009	.0096	-.0470		
			5	4	-.0026	-.0027	-.0307	.1511		
			5	6	-.0014	-.0019	-.0357			
			7	6	.0135	.0176	.3385			
2F	7/2	2F 5/2	0							
			2	2	.0003	-.0003	-.0002	-.0185	.0550	
			4	4	-.0020	-.0021	-.0231	.1135		
			6	6	.0125	.0163	.3133			
			1							
			1	0	.0002	-.0011	.0005	-.0020	.0838	-.2156
			1	2	-.0004	.0005	.0003	.0293	-.0869	
			2	2	.0008	-.0009	-.0005	-.0529	.1571	
			3	2	-.0005	.0006	.0004	.0361	-.1073	
			3	4	.0016	.0017	.0194	-.0954		
			4	4	-.0031	-.0032	-.0361	.1776		
			5	4	.0016	.0017	.0187	-.0918		
			5	6	-.0047	-.0061	-.1175			
			6	6	.0135	.0176	.3384			
2F	7/2	3P 3/2	0							
			2	2	.0000	-.0027	-.0022	-.0312	.2473	
			4	4	-.0008	.0042	.0043	.1881		
			1							
			2	2	.0000	-.0022	-.0018	-.0255	.2019	
			3	2	.0000	-.0023	-.0019	-.0264	.2090	
			3	4	.0002	-.0012	-.0012	-.0551		
			4	4	-.0003	.0019	.0019	.0841		
			5	4	-.0016	.0086	.0087	.3856		
2F	7/2	3P 1/2	0							
			4	4	-.0009	.0049	.0050	.2226		
			1							
			3	2	-.0000	.0027	.0021	.0305	-.2414	
			3	4	.0002	-.0011	-.0011	-.0477		
			4	4	-.0010	.0055	.0056	.2489		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

2F 5/2	2F 5/2	0							
			0	0	-.0001	.0009	-.0004	.0016	-.0679	.1747
			2	2	.0005	-.0005	-.0003	-.0320	.0952	
			4	4	-.0015	-.0015	-.0171	.0842		
		1								
			1	0	.0001	-.0004	.0002	-.0008	.0331	-.0852
			1	2	.0006	-.0006	-.0004	-.0370	.1099	
			3	2	-.0002	.0002	.0001	.0121	-.0360	
			3	4	-.0025	-.0026	-.0290	.1422		
			5	4	.0003	.0003	.0035	-.0171		
			5	6	.0125	.0164	.3154			
2F 5/2	3P 3/2	0							
			2	2	-.0000	.0011	.0009	.0127	-.1010	
			4	4	.0010	-.0056	-.0057	-.2524		
		1								
			1	2	.0000	-.0036	-.0029	-.0413	.3272	
			2	2	.0000	-.0023	-.0018	-.0260	.2061	
			3	2	.0000	-.0007	-.0006	-.0079	.0623	
			3	4	-.0007	.0041	.0042	.1847		
			4	4	-.0011	.0063	.0064	.2822		
2F 5/2	3P 1/2	0							
			2	2	.0000	-.0021	-.0017	-.0238	.1889	
		1								
			2	2	-.0000	.0017	.0014	.0195	-.1542	
			3	2	-.0000	.0004	.0003	.0044	-.0348	
			3	4	-.0013	.0073	.0075	.3305		
3P 3/2	3P 3/2	0							
			0	0	-.0002	-.0001	-.0015	.0063	.0066	.3209
			2	2	.0004	.0006	.0067	.0138	.1636	
		1								
			1	0	-.0002	-.0001	-.0011	.0047	.0049	.2392
			1	2	-.0002	-.0003	-.0032	-.0065	-.0771	
			3	2	.0006	.0010	.0117	.0238	.2834	
3P 3/2	3P 1/2	0							
			2	2	.0005	.0008	.0095	.0195	.2313	
		1								
			1	0	.0002	.0001	.0014	-.0059	-.0062	-.3025
			1	2	-.0003	-.0004	-.0050	-.0103	-.1219	
			2	2	.0006	.0010	.0116	.0238	.2833	
3P 1/2	3P 1/2	0							
			0	0	-.0002	-.0001	-.0010	.0045	.0046	.2269
		1								
			1	0	.0001	.0000	.0003	-.0015	-.0015	-.0756
			1	2	.0005	.0008	.0100	.0205	.2439	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

NN1= 5 NN2= 6

N L J	N L J	S	J	L	G(1)	G(2)	G(3)	G(4)	G(5)	G(6)	G(7)
		MASS=224 NU= .165									
1H11/2	1I13/2	0									
			1	1	-.0001	.0008	-.0053	.0203	-.0403	.0329	
			3	3	.0004	-.0032	.0135	-.0286	.0243		
			5	5	-.0022	.0122	-.0295	.0272			
			7	7	.0115	-.0367	.0393				
			9	9	-.0508	.0731					
			11	11	.1878						
		1									
			1	1	.0000	-.0005	.0038	-.0143	.0285	-.0233	
			2	1	-.0000	.0005	-.0034	.0130	-.0258	.0211	
			2	3	-.0002	.0019	-.0078	.0165	-.0140		
			3	3	-.0001	.0009	-.0039	.0083	-.0070		
			4	3	.0003	-.0029	.0120	-.0254	.0216		
			4	5	.0011	-.0060	.0144	-.0132			
			5	5	.0004	-.0022	.0054	-.0050			
			6	5	-.0025	.0135	-.0325	.0300			
			6	7	-.0046	.0146	-.0156				
			7	7	-.0015	.0049	-.0052				
			8	7	.0160	-.0512	.0548				
			8	9	.0157	-.0225					
			9	9	.0054	-.0077					
			10	9	-.0966	.1390					
			10	11	-.0391						
			11	11	-.0163						
			12	11	.6483						
1H11/2	1I11/2	0									
			1	1	-.0000	.0001	-.0006	.0023	-.0046	.0038	
			3	3	.0001	-.0009	.0039	-.0083	.0070		
			5	5	-.0011	.0060	-.0144	.0133			
			7	7	.0086	-.0275	.0294				
			9	9	-.0593	.0854					
			11	11	.4404						
		1									
			0	1	.0001	-.0010	.0073	-.0276	.0549	-.0449	
			1	1	-.0000	.0007	-.0052	.0196	-.0390	.0319	
			2	1	.0000	-.0003	.0023	-.0086	.0172	-.0140	
			2	3	-.0003	.0028	-.0117	.0248	-.0211		
			3	3	.0004	-.0032	.0135	-.0286	.0243		
			4	3	-.0002	.0017	-.0074	.0156	-.0132		
			4	5	.0018	-.0097	.0234	-.0216			
			5	5	-.0024	.0131	-.0315	.0291			
			6	5	.0013	-.0070	.0169	-.0156			
			6	7	-.0088	.0281	-.0300				
			7	7	.0138	-.0441	.0471				
			8	7	-.0066	.0211	-.0225				
			8	9	.0381	-.0548					
			9	9	-.0751	.1080					
			10	9	.0272	-.0391					
			10	11	-.1390						
			11	11	.4600						
1H11/2	2G 9/2	0									
			1	1	.0001	-.0006	.0002	.0153	-.0624	.0772	
			3	3	-.0004	.0007	.0084	-.0422	.0566		
			5	5	.0015	.0039	-.0384	.0624			

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			7	7	-.0040	-.0344	.0873			
			9	9	.0049	.1487				
		1								
			1	1	.0001	-.0004	.0001	.0109	-.0442	.0546
			2	1	.0001	-.0004	.0001	.0101	-.0411	.0508
			2	3	.0002	-.0004	-.0046	.0233	-.0313	
			3	3	-.0001	.0002	.0024	-.0122	.0163	
			4	3	-.0004	.0007	.0079	-.0398	.0535	
			4	5	-.0007	-.0017	.0172	-.0279		
			5	5	.0003	.0007	-.0070	.0114		
			6	5	.0019	.0048	-.0475	.0771		
			6	7	.0014	.0118	-.0299			
			7	7	-.0005	-.0046	.0117			
			8	7	-.0069	-.0589	.1495			
			8	9	-.0011	-.0340				
			9	9	.0005	.0157				
			10	9	.0155	.4678				
1H11/2	2G 7/2	0								
			3	3	-.0001	.0002	.0027	-.0135	.0181	
			5	5	.0009	.0023	-.0227	.0369		
			7	7	-.0040	-.0344	.0873			
			9	9	.0103	.3118				
		1								
			2	1	-.0001	.0006	-.0002	-.0158	.0645	-.0797
			2	3	.0001	-.0003	-.0030	.0148	-.0199	
			3	3	-.0004	.0007	.0078	-.0389	.0522	
			4	3	.0003	-.0006	-.0071	.0356	-.0479	
			4	5	-.0008	-.0019	.0192	-.0312		
			5	5	.0016	.0042	-.0415	.0674		
			6	5	-.0011	-.0029	.0291	-.0473		
			6	7	.0022	.0192	-.0487			
			7	7	-.0054	-.0459	.1166			
			8	7	.0027	.0228	-.0580			
			8	9	-.0029	-.0877				
			9	9	.0109	.3287				
1H11/2	3D 5/2	0								
			3	3	-.0002	.0022	.0009	-.0508	.1082	
			5	5	.0010	-.0036	-.0308	.0968		
			7	7	-.0040	-.0059	.1194			
		1								
			3	3	-.0002	.0019	.0008	-.0440	.0937	
			4	3	-.0001	.0016	.0007	-.0362	.0769	
			4	5	-.0003	.0011	.0098	-.0309		
			5	5	.0006	-.0020	-.0169	.0530		
			6	5	.0014	-.0047	-.0406	.1274		
			6	7	.0009	.0014	-.0280			
			7	7	-.0016	-.0024	.0478			
			8	7	-.0105	-.0154	.3130			
1H11/2	3D 3/2	0								
			5	5	.0007	-.0023	-.0202	.0634		
			7	7	-.0066	-.0097	.1979			
		1								
			4	3	.0002	-.0025	-.0010	.0567	-.1207	
			4	5	-.0002	.0007	.0063	-.0197		
			5	5	.0010	-.0034	-.0295	.0926		
			6	5	-.0009	.0031	.0271	-.0849		
			6	7	.0014	.0021	-.0420			
			7	7	-.0071	-.0104	.2116			
1H11/2	4S 1/2	0								
			5	5	.0008	-.0055	-.0239	.1252		
		1								
			5	5	.0007	-.0050	-.0218	.1143		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			6	5	.0011	-.0075	-.0324	.1695	
1H 9/2	1I13/2	0							
			3	3	-.0001	.0008	-.0036	.0075	-.0064
			5	5	.0011	-.0058	.0139	-.0128	
			7	7	-.0084	.0270	-.0289		
			9	9	.0587	-.0844			
			11	11	-.4371				
		1							
			2	1	-.0001	.0008	-.0056	.0212	-.0421 .0344
			2	3	.0001	-.0011	.0048	-.0101	.0086
			3	3	.0003	-.0029	.0124	-.0261	.0222
			4	3	.0003	-.0028	.0117	-.0246	.0209
			4	5	-.0011	.0061	-.0148	.0137	
			5	5	-.0023	.0126	-.0304	.0281	
			6	5	-.0018	.0096	-.0231	.0213	
			6	7	.0064	-.0206	.0220		
			7	7	.0135	-.0433	.0463		
			8	7	.0084	-.0267	.0286		
			8	9	-.0300	.0432			
			9	9	-.0742	.1068			
			10	9	-.0329	.0473			
			10	11	.1147				
			11	11	.4565				
1H 9/2	1I11/2	0							
			1	1	-.0000	.0007	-.0049	.0186	-.0370 .0303
			3	3	.0003	-.0029	.0124	-.0261	.0222
			5	5	-.0020	.0110	-.0265	.0245	
			7	7	.0100	-.0320	.0342		
			9	9	-.0405	.0583			
		1							
			1	1	-.0000	.0005	-.0035	.0132	-.0262 .0214
			2	1	.0000	-.0003	.0022	-.0085	.0169 -.0138
			2	3	.0003	-.0028	.0119	-.0252	.0215
			3	3	.0001	-.0008	.0036	-.0075	.0064
			4	3	-.0001	.0013	-.0055	.0115	-.0098
			4	5	-.0024	.0131	-.0316	.0292	
			5	5	-.0004	.0020	-.0048	.0045	
			6	5	.0007	-.0040	.0096	-.0089	
			6	7	.0154	-.0493	.0527		
			7	7	.0013	-.0043	.0046		
			8	7	-.0027	.0087	-.0093		
			8	9	-.0927	.1333			
			9	9	-.0043	.0061			
			10	9	.0061	-.0087			
			10	11	.6215				
1H 9/2	2G 9/2	0							
			1	1	-.0000	.0001	-.0000	-.0021	.0085 -.0105
			3	3	.0001	-.0003	-.0029	.0147	-.0198
			5	5	-.0009	-.0024	.0235	-.0382	
			7	7	.0041	.0350	-.0889		
			9	9	-.0104	-.3154			
		1							
			0	1	.0001	-.0008	.0003	.0208	-.0846 .1045
			1	1	.0001	-.0006	.0002	.0148	-.0601 .0743
			2	1	.0000	-.0003	.0001	.0065	-.0263 .0325
			2	3	-.0003	.0006	.0072	-.0363	.0488
			3	3	-.0004	.0008	.0085	-.0426	.0572
			4	3	-.0002	.0004	.0045	-.0225	.0303
			4	5	.0012	.0030	-.0304	.0493	
			5	5	.0017	.0043	-.0430	.0698	
			6	5	.0008	.0021	-.0213	.0346	
			6	7	-.0031	-.0262	.0665		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			7	7	-.0055	-.0468	.1188			
			8	7	-.0021	-.0180	.0457			
			8	9	.0037	.1111				
			9	9	.0110	.3324				
1H	9/2	2G 7/2	0							
			1	1	.0001	-.0006	.0002	.0139	-.0564	.0697
			3	3	-.0004	.0007	.0075	-.0376	.0505	
			5	5	.0013	.0033	-.0333	.0540		
			7	7	-.0032	-.0273	.0693			
			1							
			1	1	-.0001	.0004	-.0001	-.0098	.0399	-.0493
			2	1	-.0000	.0002	-.0001	-.0061	.0246	-.0304
			2	3	-.0004	.0007	.0077	-.0388	.0522	
			3	3	.0001	-.0002	-.0022	.0109	-.0146	
			4	3	.0001	-.0003	-.0030	.0151	-.0202	
			4	5	.0018	.0046	-.0455	.0738		
			5	5	-.0002	-.0006	.0061	-.0099		
			6	5	-.0004	-.0010	.0100	-.0162		
			6	7	-.0066	-.0560	.1423			
			7	7	.0004	.0036	-.0093			
			8	7	.0005	.0045	-.0114			
			8	9	.0147	.4445				
1H	9/2	3D 5/2	0							
			3	3	.0001	-.0007	-.0003	.0161	-.0342	
			5	5	-.0008	.0027	.0233	-.0732		
			7	7	.0071	.0104	-.2110			
			1							
			2	3	-.0002	.0030	.0013	-.0688	.1465	
			3	3	-.0001	.0016	.0007	-.0371	.0790	
			4	3	-.0000	.0005	.0002	-.0107	.0228	
			4	5	.0011	-.0039	-.0332	.1041		
			5	5	.0011	-.0040	-.0341	.1069		
			6	5	.0003	-.0011	-.0099	.0310		
			6	7	-.0039	-.0057	.1149			
			7	7	-.0076	-.0111	.2256			
1H	9/2	3D 3/2	0							
			3	3	-.0001	.0019	.0008	-.0435	.0926	
			5	5	.0008	-.0028	-.0243	.0762		
			1							
			3	3	.0001	-.0016	-.0007	.0377	-.0802	
			4	3	.0000	-.0004	-.0002	.0100	-.0213	
			4	5	.0012	-.0041	-.0355	.1113		
			5	5	-.0004	.0015	.0133	-.0417		
			6	5	-.0001	.0005	.0040	-.0124		
			6	7	-.0096	-.0141	.2867			
1H	9/2	4S 1/2	0							
			5	5	-.0007	.0050	.0218	-.1143		
			1							
			4	5	.0011	-.0075	-.0324	.1695		
			5	5	.0008	-.0055	-.0239	.1252		
2F	7/2	1113/2	0							
			3	3	-.0002	-.0009	.0150	-.0553	.0673	
			5	5	.0003	.0082	-.0435	.0620		
			7	7	.0013	-.0411	.0834			
			9	9	-.0139	.1400				
			1							
			3	3	.0002	.0008	-.0130	.0479	-.0582	
			4	3	-.0001	-.0006	.0097	-.0357	.0434	
			4	5	-.0001	-.0030	.0159	-.0226		
			5	5	-.0002	-.0045	.0238	-.0340		
			6	5	.0003	.0089	-.0472	.0673		
			6	7	-.0004	.0128	-.0261			

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			7	7	-.0005	.0165	-.0334		
			8	7	.0021	-.0657	.1335		
			8	9	.0030	-.0304			
			9	9	.0044	-.0443			
			10	9	-.0419	.4222			
2F	7/2	1I11/2	0						
			3	3	-.0001	-.0002	.0037	-.0137	.0166
			5	5	.0002	.0045	-.0238	.0340	
			7	7	.0012	-.0395	.0803		
			9	9	-.0285	.2869			
			1						
			2	3	.0003	.0012	-.0204	.0754	-.0917
			3	3	-.0001	-.0006	.0107	-.0395	.0480
			4	3	.0000	.0002	-.0033	.0121	-.0147
			4	5	-.0003	-.0089	.0470	-.0670	
			5	5	.0003	.0082	-.0435	.0620	
			6	5	-.0001	-.0029	.0152	-.0218	
			6	7	-.0012	.0397	-.0806		
			7	7	.0017	-.0528	.1073		
			8	7	-.0005	.0157	-.0320		
			8	9	.0126	-.1267			
			9	9	-.0300	.3024			
2F	7/2	2G 9/2	0						
			1	1	-.0002	.0007	.0004	.0046	-.0769	.1634
			3	3	.0006	-.0002	.0003	-.0464	.1185	
			5	5	-.0021	-.0029	-.0296	.1268	
			7	7	.0057	.0080	.1624		
			1						
			1	1	.0001	-.0005	-.0003	-.0033	.0543	-.1155
			2	1	-.0001	.0005	.0003	.0032	-.0528	.1122
			2	3	-.0003	.0001	-.0002	.0240	-.0612	
			3	3	-.0002	.0001	-.0001	.0134	-.0342	
			4	3	.0007	-.0003	.0004	-.0483	.1233	
			4	5	.0008	.0011	.0116	-.0495		
			5	5	.0004	.0005	.0054	-.0231		
			6	5	-.0031	-.0044	-.0444	.1899		
			6	7	-.0015	-.0021	-.0417			
			7	7	-.0008	-.0011	-.0217			
			8	7	.0161	.0224	.4558			
2F	7/2	2G 7/2	0						
			1	1	-.0000	.0001	.0001	.0008	-.0130	.0276
			3	3	.0003	-.0001	.0002	-.0208	.0530	
			5	5	-.0018	-.0025	-.0250	.1071		
			7	7	.0107	.0150	.3039			
			1						
			0	1	.0002	-.0010	-.0005	-.0062	.1031	-.2192
			1	1	-.0002	.0007	.0004	.0044	-.0735	.1562
			2	1	.0001	-.0003	-.0002	-.0019	.0318	-.0676
			2	3	-.0006	.0002	-.0003	.0397	-.1015	
			3	3	.0007	-.0002	.0003	-.0479	.1224	
			4	3	-.0003	.0001	-.0002	.0240	-.0612	
			4	5	.0016	.0023	.0233	-.0997		
			5	5	-.0026	-.0036	-.0366	.1565		
			6	5	.0011	.0015	.0150	-.0642		
			6	7	-.0044	-.0061	-.1234			
			7	7	.0115	.0160	.3248			
2F	7/2	3D 5/2	0						
			1	1	.0001	.0002	-.0017	-.0047	-.0493	.2380
			3	3	-.0003	-.0018	-.0029	-.0198	.1683	
			5	5	.0002	.0044	.0105	.1654		
			1						
			1	1	.0001	.0002	-.0012	-.0033	-.0348	.1683

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			2	1	.0001	.0002	-.0012	-.0035	-.0362	.1749
			2	3	.0001	.0008	.0013	.0091	-.0777	
			3	3	-.0001	-.0005	-.0008	-.0057	.0486	
			4	3	-.0003	-.0022	-.0036	-.0244	.2080	
			4	5	-.0001	-.0013	-.0031	-.0493		
			5	5	.0000	.0008	.0019	.0302		
			6	5	.0005	.0106	.0255	.3994		
2F	7/2	3D 3/2	0							
			3	3	-.0001	-.0010	-.0017	-.0114	.0972	
			5	5	.0003	.0067	.0161	.2526		
			1							
			2	1	-.0001	-.0002	.0016	.0046	.0483	-.2332
			2	3	.0001	.0006	.0010	.0069	-.0583	
			3	3	-.0003	-.0018	-.0029	-.0198	.1683	
			4	3	.0002	.0013	.0021	.0147	-.1254	
			4	5	-.0001	-.0022	-.0052	-.0818		
			5	5	.0003	.0073	.0176	.2767		
2F	7/2	4S 1/2	0							
			3	3	-.0003	-.0010	.0006	.0000	.2061	
			1							
			3	3	-.0003	-.0009	.0005	.0000	.1785	
			4	3	-.0004	-.0013	.0008	.0000	.2726	
2F	5/2	1I13/2	0							
			5	5	-.0001	-.0039	.0206	-.0294		
			7	7	-.0012	.0371	-.0753			
			9	9	.0275	-.2764				
			1							
			4	3	-.0002	-.0010	.0173	-.0639	.0777	
			4	5	.0001	.0017	-.0089	.0127		
			5	5	.0003	.0071	-.0376	.0537		
			6	5	.0003	.0079	-.0418	.0596		
			6	7	.0005	-.0145	.0294			
			7	7	.0015	-.0495	.1006			
			8	7	.0010	-.0330	.0671			
			8	9	-.0060	.0604				
			9	9	-.0289	.2914				
2F	5/2	1I11/2	0							
			3	3	-.0002	-.0008	.0134	-.0494	.0600	
			5	5	.0003	.0071	-.0376	.0537		
			7	7	.0010	-.0326	.0662			
			1							
			3	3	-.0002	-.0007	.0116	-.0427	.0520	
			4	3	.0000	.0002	-.0037	.0135	-.0164	
			4	5	.0003	.0079	-.0420	.0599		
			5	5	.0001	.0039	-.0206	.0294		
			6	5	-.0001	-.0019	.0099	-.0141		
			6	7	.0019	-.0611	.1242			
			7	7	.0004	-.0131	.0265			
			8	7	-.0002	.0050	-.0102			
			8	9	-.0394	.3971				
2F	5/2	2G 9/2	0							
			3	3	-.0003	.0001	-.0001	.0189	-.0484	
			5	5	.0017	.0024	.0242	-.1035		
			7	7	-.0105	-.0147	-.2984			
			1							
			2	1	-.0002	.0008	.0004	.0047	-.0780	.1657
			2	3	.0002	-.0001	.0001	-.0162	.0414	
			3	3	.0006	-.0002	.0003	-.0438	.1117	
			4	3	.0005	-.0002	.0003	-.0379	.0968	
			4	5	-.0010	-.0014	-.0147	.0631		
			5	5	-.0025	-.0035	-.0353	.1512		
			6	5	-.0014	-.0020	-.0205	.0877		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			6	7	.0032	.0044	.0903		
			7	7	.0113	.0157	.3190		
2F 5/2	2G 7/2	0							
			1	1	-.0002	.0007	.0004	.0041	-.0675	.1435
			3	3	.0006	-.0002	.0003	-.0397	.1015	
			5	5	-.0016	-.0023	-.0233	.0997		
		1								
			1	1	-.0001	.0005	.0003	.0029	-.0477	.1015
			2	1	.0001	-.0003	-.0001	-.0017	.0276	-.0586
			2	3	.0006	-.0002	.0003	-.0459	.1172	
			3	3	.0002	-.0001	.0001	-.0115	.0293	
			4	3	-.0002	.0001	-.0001	.0134	-.0342	
			4	5	-.0029	-.0041	-.0417	.1784		
			5	5	-.0003	-.0004	-.0043	.0182		
			6	5	.0003	.0004	.0043	-.0185		
			6	7	.0151	.0210	.4274			
2F 5/2	3D 5/2	0								
			1	1	-.0000	-.0001	.0004	.0011	.0110	-.0532
			3	3	.0002	.0011	.0018	.0125	-.1064	
			5	5	-.0003	-.0069	-.0167	-.2615		
		1								
			0	1	.0002	.0003	-.0022	-.0062	-.0652	.3148
			1	1	.0001	.0002	-.0016	-.0045	-.0467	.2258
			2	1	.0001	.0001	-.0007	-.0019	-.0197	.0952
			2	3	-.0002	-.0015	-.0024	-.0168	.1428	
			3	3	-.0003	-.0019	-.0032	-.0217	.1843	
			4	3	-.0001	-.0008	-.0014	-.0093	.0793	
			4	5	.0002	.0034	.0082	.1293		
			5	5	.0004	.0076	.0183	.2864		
2F 5/2	3D 3/2	0								
			1	1	.0001	.0002	-.0014	-.0039	-.0412	.1991
			3	3	-.0002	-.0014	-.0022	-.0153	.1303	
		1								
			1	1	-.0001	-.0001	.0010	.0028	.0291	-.1408
			2	1	-.0000	-.0001	.0005	.0014	.0148	-.0714
			2	3	-.0003	-.0020	-.0033	-.0224	.1904	
			3	3	.0001	.0004	.0006	.0044	-.0376	
			4	3	.0000	.0003	.0005	.0033	-.0280	
			4	5	.0005	.0097	.0233	.3657		
2F 5/2	4S 1/2	0								
			3	3	.0003	.0009	-.0005	-.0000	-.1785	
		1								
			2	3	-.0004	-.0013	.0008	.0000	.2726	
			3	3	-.0003	-.0010	.0006	.0000	.2061	
3P 3/2	1113/2	0								
			5	5	.0009	.0041	-.0528	.1081		
			7	7	-.0013	-.0270	.1098			
		1								
			5	5	-.0008	-.0038	.0482	-.0987		
			6	5	.0007	.0035	-.0443	.0907		
			6	7	.0002	.0049	-.0199			
			7	7	.0009	.0181	-.0734			
			8	7	-.0029	-.0597	.2424			
3P 3/2	1111/2	0								
			5	5	.0004	.0020	-.0258	.0527		
			7	7	-.0019	-.0405	.1647			
		1								
			4	5	-.0012	-.0056	.0720	-.1473		
			5	5	.0006	.0029	-.0376	.0770		
			6	5	-.0001	-.0005	.0069	-.0141		
			6	7	.0015	.0315	-.1280			
			7	7	-.0021	-.0433	.1761			

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

3P 3/2	2G 9/2	0							
			3	3	.0003	-.0021	-.0022	-.0385	.1965
			5	5	-.0013	.0020	-.0034	.1616	
		1							
			3	3	-.0003	.0018	.0019	.0333	-.1702
			4	3	.0003	-.0017	-.0019	-.0325	.1659
			4	5	.0003	-.0005	.0008	-.0393	
			5	5	.0007	-.0011	.0019	-.0885	
			6	5	-.0027	.0042	-.0073	.3428	
3P 3/2	2G 7/2	0							
			3	3	.0001	-.0009	-.0010	-.0172	.0879
			5	5	-.0018	.0028	-.0049	.2285	
		1							
			2	3	-.0004	.0028	.0030	.0516	-.2636
			3	3	.0002	-.0016	-.0017	-.0298	.1522
			4	3	-.0001	.0004	.0004	.0074	-.0378
			4	5	.0013	-.0021	.0037	-.1726	
			5	5	-.0019	.0031	-.0053	.2503	
3P 3/2	3D 5/2	0							
			1	1	-.0002	-.0003	-.0021	.0018	-.0056	.2987
			3	3	.0003	.0005	.0069	.0153	.1955	
		1							
			1	1	.0001	.0002	.0015	-.0013	.0040	-.2112
			2	1	-.0001	-.0002	-.0018	.0015	-.0047	.2499
			2	3	-.0001	-.0002	-.0025	-.0056	-.0714	
			3	3	-.0001	-.0001	-.0020	-.0044	-.0564	
			4	3	.0006	.0010	.0133	.0297	.3786	
3P 3/2	3D 3/2	0							
			1	1	-.0001	-.0001	-.0007	.0006	-.0019	.0996
			3	3	.0004	.0006	.0084	.0188	.2395	
		1							
			0	1	.0002	.0004	.0027	-.0023	.0073	-.3856
			1	1	-.0002	-.0003	-.0020	.0017	-.0053	.2816
			2	1	.0001	.0001	.0008	-.0007	.0021	-.1091
			2	3	-.0002	-.0004	-.0058	-.0128	-.1636	
			3	3	.0004	.0007	.0097	.0217	.2765	
3P 3/2	4S 1/2	0							
			1	1	.0000	.0004	.0011	.0101	.0257	.2726
		1							
			1	1	.0000	.0003	.0008	.0071	.0181	.1928
			2	1	.0000	.0005	.0013	.0124	.0314	.3339
3P 1/2	1I13/2	0							
			7	7	.0016	.0344	-.1400		
		1							
			6	5	.0009	.0044	-.0561	.1148	
			6	7	-.0002	-.0039	.0158		
			7	7	-.0018	-.0368	.1496		
3P 1/2	1I11/2	0							
			5	5	.0007	.0033	-.0415	.0850	
		1							
			5	5	.0006	.0030	-.0379	.0776	
			6	5	-.0001	-.0003	.0043	-.0089	
			6	7	-.0024	-.0503	.2043		
3P 1/2	2G 9/2	0							
			5	5	.0015	-.0024	.0042	-.1979	
		1							
			4	3	.0003	-.0021	-.0023	-.0392	.2001
			4	5	-.0003	.0004	-.0007	.0326	
			5	5	-.0017	.0027	-.0046	.2168	
3P 1/2	2G 7/2	0							
			3	3	.0002	-.0016	-.0017	-.0298	.1522
		1							

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			3	3	.0002	-.0014	-.0015	-.0258	.1318	
			4	3	-.0000	.0002	.0003	.0044	-.0224	
			4	5	-.0023	.0036	-.0062	.2917		
3P 1/2	3D 5/2	0								
			3	3	-.0003	-.0006	-.0077	-.0171	-.2186	
		1								
			2	1	-.0002	-.0002	-.0019	.0016	-.0050	.2671
			2	3	.0001	.0002	.0024	.0052	.0668	
			3	3	.0004	.0007	.0089	.0198	.2524	
3P 1/2	3D 3/2	0								
			1	1	-.0001	-.0002	-.0016	.0013	-.0042	.2226
		1								
			1	1	-.0001	-.0001	-.0011	.0009	-.0030	.1574
			2	1	.0000	.0001	.0004	-.0003	.0010	-.0545
			2	3	.0005	.0009	.0115	.0256	.3272	
3P 1/2	4S 1/2	0								
			1	1	-.0000	-.0003	-.0008	-.0071	-.0181	-.1928
		1								
			0	1	.0000	.0005	.0013	.0124	.0314	.3339
			1	1	.0000	.0004	.0011	.0101	.0257	.2726

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

NN1= 6 NN2= 6

N L J	N L J	S	J	L	G(1)	G(2)	G(3)	G(4)	G(5)	G(6)	G(7)
		MASS=224 NU= .165									
1I13/2	1I13/2	0									
			0	0	.0000	-.0001	.0009	-.0053	.0176	-.0312	.0233
			2	2	-.0000	.0004	-.0027	.0093	-.0170	.0129	
			4	4	.0003	-.0020	.0079	-.0155	.0124		
			6	6	-.0015	.0078	-.0176	.0154			
			8	8	.0078	-.0235	.0239				
			10	10	-.0343	.0471					
			12	12	.1272						
		1									
			1	0	.0000	-.0001	.0006	-.0033	.0109	-.0194	.0145
			1	2	.0000	-.0003	.0019	-.0066	.0120	-.0091	
			3	2	-.0000	.0004	-.0022	.0076	-.0138	.0105	
			3	4	-.0001	.0011	-.0044	.0087	-.0070		
			5	4	.0003	-.0020	.0077	-.0152	.0121		
			5	6	.0007	-.0036	.0082	-.0072			
			7	6	-.0018	.0092	-.0209	.0182			
			7	8	-.0030	.0090	-.0091				
			9	8	.0115	-.0347	.0353				
			9	10	.0102	-.0140					
			11	10	-.0684	.0941					
			11	12	-.0255						
			13	12	.4585						
1I13/2	1I11/2	0									
			2	2	-.0000	.0001	-.0007	.0024	-.0044	.0034	
			4	4	.0001	-.0010	.0039	-.0077	.0062		
			6	6	-.0012	.0060	-.0137	.0119			
			8	8	.0089	-.0269	.0273				
			10	10	-.0599	.0824					
			12	12	.4404						
		1									
			1	0	-.0000	.0001	-.0010	.0059	-.0195	.0346	-.0258
			1	2	.0000	-.0003	.0021	-.0073	.0134	-.0102	
			2	2	-.0000	.0006	-.0037	.0129	-.0235	.0179	
			3	2	.0000	-.0004	.0028	-.0095	.0173	-.0132	
			3	4	-.0002	.0018	-.0071	.0140	-.0112		
			4	4	.0004	-.0029	.0114	-.0224	.0179		
			5	4	-.0003	.0020	-.0078	.0153	-.0122		
			5	6	.0014	-.0073	.0164	-.0143			
			6	6	-.0024	.0121	-.0274	.0239			
			7	6	.0015	-.0075	.0169	-.0147			
			7	8	-.0073	.0222	-.0226				
			8	8	.0136	-.0412	.0419				
			9	8	-.0071	.0216	-.0219				
			9	10	.0327	-.0449					
			10	10	-.0743	.1021					
			11	10	.0286	-.0393					
			11	12	-.1219						
			12	12	.4584						
1I13/2	2G 9/2	0									
			2	2	.0001	-.0003	-.0013	.0156	-.0489	.0527	
			4	4	-.0003	-.0002	.0097	-.0365	.0432		
			6	6	.0008	.0059	-.0361	.0514			
			8	8	-.0012	-.0357	.0763				
			10	10	-.0043	.1370					

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

		1							
			2	2	.0001	-.0003	-.0011	.0128	-.0399	.0430
			3	2	.0000	-.0002	-.0008	.0099	-.0308	.0332
			3	4	.0001	.0001	-.0045	.0169	-.0200	
			4	4	-.0001	-.0001	.0043	-.0163	.0193	
			5	4	-.0003	-.0002	.0093	-.0352	.0416	
			5	6	-.0003	-.0024	.0145	-.0206		
			6	6	.0002	.0018	-.0111	.0158		
			7	6	.0010	.0076	-.0461	.0655		
			7	8	.0004	.0113	-.0241			
			8	8	-.0003	-.0084	.0180			
			9	8	-.0021	-.0635	.1355			
			9	10	.0009	-.0294				
			10	10	-.0008	.0261				
			11	10	-.0141	.4469				
1I13/2	2G 7/2	0								
			4	4	-.0001	-.0001	.0034	-.0129	.0153	
			6	6	.0005	.0038	-.0228	.0325		
			8	8	-.0012	-.0375	.0801			
			10	10	-.0094	.2979				
		1								
			3	2	-.0001	.0003	.0015	-.0176	.0551	-.0594
			3	4	.0001	.0001	-.0025	.0095	-.0112	
			4	4	-.0002	-.0002	.0084	-.0318	.0375	
			5	4	.0002	.0002	-.0091	.0341	-.0403	
			5	6	-.0003	-.0025	.0150	-.0213		
			6	6	.0009	.0064	-.0388	.0551		
			7	6	-.0007	-.0049	.0299	-.0425		
			7	8	.0006	.0174	-.0372			
			8	8	-.0016	-.0486	.1038			
			9	8	.0008	.0256	-.0548			
			9	10	.0023	-.0727				
			10	10	-.0099	.3125				
1I13/2	3D 5/2	0								
			4	4	-.0002	.0013	.0057	-.0500	.0849	
			6	6	.0009	-.0001	-.0342	.0811		
			8	8	-.0028	-.0148	.1057			
		1								
			4	4	-.0002	.0012	.0051	-.0447	.0759	
			5	4	-.0002	.0009	.0040	-.0350	.0595	
			5	6	-.0003	.0000	.0094	-.0223		
			6	6	.0006	-.0001	-.0211	.0500		
			7	6	.0012	-.0002	-.0457	.1082		
			7	8	.0006	.0031	-.0223			
			8	8	-.0013	-.0070	.0498			
			9	8	-.0076	-.0399	.2840			
1I13/2	3D 3/2	0								
			6	6	.0006	-.0001	-.0232	.0549		
			8	8	-.0048	-.0252	.1796			
		1								
			5	4	.0003	-.0015	-.0065	.0572	-.0971	
			5	6	-.0002	.0000	.0058	-.0137		
			6	6	.0009	-.0001	-.0322	.0762		
			7	6	-.0008	.0001	.0313	-.0742		
			7	8	.0009	.0046	-.0325			
			8	8	-.0051	-.0268	.1905			
1I13/2	4S 1/2	0								
			6	6	.0009	-.0022	-.0320	.1063		
		1								
			6	6	.0008	-.0020	-.0297	.0984		
			7	6	.0012	-.0030	-.0437	.1449		
1I11/2	1I11/2	0								

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			0	0	.0000	-.0001	.0009	-.0049	.0163	-.0289	.0216
			2	2	-.0000	.0004	-.0025	.0086	-.0157	.0119	
			4	4	.0002	-.0019	.0072	-.0142	.0114		
			6	6	-.0014	.0070	-.0159	.0139			
			8	8	.0068	-.0205	.0209				
			10	10	-.0274	.0377					
		1									
			1	0	-.0000	.0000	-.0005	.0026	-.0086	.0154	-.0115
			1	2	-.0000	.0004	-.0024	.0083	-.0151	.0115	
			3	2	.0000	-.0002	.0013	-.0043	.0079	-.0061	
			3	4	.0003	-.0020	.0077	-.0152	.0121		
			5	4	-.0001	.0008	-.0031	.0061	-.0049		
			5	6	-.0018	.0090	-.0204	.0178			
			7	6	.0005	-.0025	.0056	-.0049			
			7	8	.0111	-.0335	.0341				
			9	8	-.0018	.0053	-.0054				
			9	10	-.0659	.0906					
			11	10	.0040	-.0054					
			11	12	.4412						
1I11/2	2G 9/2	0									
			2	2	-.0000	.0001	.0002	-.0028	.0087	-.0094	
			4	4	.0001	.0001	-.0039	.0146	-.0173		
			6	6	-.0005	-.0040	.0241	-.0342			
			8	8	.0013	.0386	-.0825				
			10	10	.0096	-.3036					
		1									
			1	2	.0001	-.0004	-.0018	.0213	-.0667	.0718	
			2	2	.0001	-.0002	-.0011	.0125	-.0391	.0422	
			3	2	.0000	-.0001	-.0004	.0046	-.0142	.0153	
			3	4	-.0003	-.0002	.0097	-.0366	.0433		
			4	4	-.0003	-.0002	.0096	-.0360	.0426		
			5	4	-.0001	-.0001	.0042	-.0158	.0187		
			5	6	.0007	.0053	-.0323	.0460			
			6	6	.0009	.0067	-.0409	.0581			
			7	6	.0004	.0028	-.0173	.0246			
			7	8	-.0010	-.0302	.0644				
			8	8	-.0017	-.0501	.1069				
			9	8	-.0006	-.0167	.0357				
			9	10	-.0035	.1116					
			10	10	-.0101	.3184					
1I11/2	2G 7/2	0									
			2	2	.0001	-.0003	-.0012	.0142	-.0444	.0479	
			4	4	-.0002	-.0002	.0087	-.0328	.0387		
			6	6	.0007	.0052	-.0314	.0446			
			8	8	-.0009	-.0284	.0608				
		1									
			2	2	-.0000	.0002	.0010	-.0116	.0363	-.0391	
			3	2	-.0000	.0001	.0004	-.0051	.0159	-.0171	
			3	4	-.0002	-.0002	.0087	-.0328	.0387		
			4	4	.0001	.0001	-.0039	.0146	-.0173		
			5	4	.0001	.0001	-.0031	.0117	-.0138		
			5	6	.0010	.0072	-.0437	.0622			
			6	6	-.0002	-.0016	.0097	-.0138			
			7	6	-.0002	-.0014	.0086	-.0123			
			7	8	-.0020	-.0603	.1289				
			8	8	.0002	.0067	-.0143				
			9	8	.0001	.0044	-.0094				
			9	10	-.0135	.4256					
1I11/2	3D 5/2	0									
			4	4	.0001	-.0004	-.0019	.0169	-.0287		
			6	6	-.0007	.0001	.0271	-.0641			
			8	8	.0052	.0271	-.1929				

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

		1									
			3	4	-.0003	.0018	.0078	-.0681	.1157		
			4	4	-.0002	.0009	.0039	-.0340	.0578		
			5	4	-.0000	.0002	.0010	-.0085	.0145		
			5	6	.0010	-.0001	-.0387	.0917			
			6	6	.0010	-.0001	-.0376	.0890			
			7	6	.0003	-.0000	-.0094	.0224			
			7	8	-.0029	-.0151	.1077				
			8	8	-.0055	-.0287	.2046				
1I11/2	3D 3/2	0									
			4	4	-.0002	.0011	.0049	-.0431	.0732		
			6	6	.0007	-.0001	-.0271	.0641			
		1									
			4	4	.0002	-.0010	-.0044	.0385	-.0655		
			5	4	.0000	-.0002	-.0010	.0084	-.0142		
			5	6	.0011	-.0001	-.0394	.0934			
			6	6	-.0004	.0001	.0167	-.0396			
			7	6	-.0001	.0000	.0039	-.0093			
			7	8	-.0070	-.0365	.2598				
1I11/2	4S 1/2	0									
			6	6	-.0008	.0020	.0297	-.0984			
		1									
			5	6	.0012	-.0030	-.0437	.1449			
			6	6	.0009	-.0022	-.0320	.1063			
2G 9/2	2G 9/2	0									
			0	0	.0000	-.0002	.0005	.0005	.0094	-.0748	.1280
			2	2	-.0001	.0003	.0002	.0038	-.0383	.0705	
			4	4	.0004	-.0001	.0009	-.0292	.0662		
			6	6	-.0014	-.0018	-.0205	.0785			
			8	8	.0041	.0051	.1080				
		1									
			1	0	.0000	-.0001	.0003	.0003	.0060	-.0477	.0817
			1	2	.0001	-.0002	-.0002	-.0025	.0255	-.0470	
			3	2	-.0001	.0003	.0002	.0034	-.0341	.0629	
			3	4	-.0002	.0000	-.0005	.0145	-.0328		
			5	4	.0005	-.0001	.0011	-.0341	.0773		
			5	6	.0005	.0007	.0076	-.0290			
			7	6	-.0023	-.0029	-.0334	.1277			
			7	8	-.0010	-.0012	-.0263				
			9	8	.0124	.0152	.3241				
2G 9/2	2G 7/2	0									
			2	2	-.0000	.0001	.0001	.0014	-.0145	.0266	
			4	4	.0003	-.0001	.0007	-.0221	.0500		
			6	6	-.0019	-.0023	-.0271	.1039			
			8	8	.0117	.0143	.3055				
		1									
			1	0	-.0000	.0002	-.0005	-.0005	-.0102	.0814	-.1393
			1	2	.0001	-.0003	-.0002	-.0030	.0299	-.0551	
			2	2	-.0001	.0005	.0003	.0053	-.0531	.0978	
			3	2	.0001	-.0003	-.0002	-.0038	.0379	-.0697	
			3	4	-.0004	.0001	-.0008	.0261	-.0591		
			4	4	.0006	-.0001	.0014	-.0445	.1007		
			5	4	-.0004	.0001	-.0009	.0273	-.0618		
			5	6	.0013	.0016	.0189	-.0725			
			6	6	-.0026	-.0032	-.0377	.1443			
			7	6	.0012	.0015	.0173	-.0662			
			7	8	-.0039	-.0047	-.1014				
			8	8	.0124	.0152	.3240				
2G 9/2	3D 5/2	0									
			2	2	.0000	.0005	-.0010	-.0015	-.0534	.1794	
			4	4	.0000	-.0016	-.0021	-.0259	.1410		
			6	6	-.0005	.0032	.0030	.1492			

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			1							
				2	2	.0000	.0004	-.0008	-.0012	-.0436	.1465	
				3	2	.0000	.0004	-.0008	-.0011	-.0387	.1298	
				3	4	-.0000	.0006	.0008	.0098	-.0533		
				4	4	.0000	-.0007	-.0009	-.0116	.0631		
				5	4	.0000	-.0021	-.0027	-.0334	.1814		
				5	6	.0001	-.0008	-.0008	-.0393			
				6	6	-.0002	.0010	.0009	.0460			
				7	6	-.0013	.0081	.0076	.3783			
2G	9/2	3D	3/2	0								
				4	4	.0000	-.0010	-.0013	-.0162	.0880		
				6	6	-.0008	.0051	.0048	.2392			
				1								
				3	2	-.0001	-.0005	.0011	.0016	.0571	-.1918	
				3	4	-.0000	.0004	.0005	.0066	-.0361		
				4	4	.0000	-.0016	-.0021	-.0253	.1377		
				5	4	-.0000	.0013	.0017	.0214	-.1162		
				5	6	.0002	-.0013	-.0012	-.0613			
				6	6	-.0009	.0055	.0052	.2584			
2G	9/2	4S	1/2	0								
				4	4	-.0001	-.0015	-.0004	-.0131	.1786		
				1								
				4	4	-.0001	-.0014	-.0004	-.0118	.1598		
				5	4	-.0001	-.0020	-.0006	-.0176	.2397		
2G	7/2	2G	7/2	0								
				0	0	.0000	-.0002	.0004	.0004	.0084	-.0669	.1145
				2	2	-.0001	.0003	.0002	.0034	-.0339	.0625	
				4	4	.0004	-.0001	.0008	-.0252	.0571		
				6	6	-.0011	-.0014	-.0162	.0621			
				1								
				1	0	-.0000	.0001	-.0002	-.0002	-.0043	.0340	-.0583
				1	2	-.0001	.0003	.0002	.0035	-.0358	.0658	
				3	2	.0000	-.0001	-.0001	-.0015	.0150	-.0276	
				3	4	.0005	-.0001	.0011	-.0330	.0747		
				5	4	-.0001	.0000	-.0003	.0082	-.0185		
				5	6	-.0022	-.0027	-.0317	.1213			
				7	6	.0002	.0002	.0029	-.0110			
				7	8	.0117	.0144	.3067				
2G	7/2	3D	5/2	0								
				2	2	-.0000	-.0001	.0003	.0004	.0151	-.0507	
				4	4	-.0000	.0011	.0015	.0183	-.0997		
				6	6	.0009	-.0054	-.0051	-.2522			
				1								
				1	2	.0001	.0007	-.0014	-.0020	-.0717	.2407	
				2	2	.0000	.0004	-.0008	-.0012	-.0432	.1450	
				3	2	.0000	.0001	-.0003	-.0004	-.0147	.0495	
				3	4	.0000	-.0016	-.0021	-.0257	.1398		
				4	4	.0000	-.0018	-.0023	-.0287	.1561		
				5	4	.0000	-.0006	-.0008	-.0099	.0538		
				5	6	-.0005	.0028	.0027	.1324			
				6	6	-.0010	.0058	.0055	.2724			
2G	7/2	3D	3/2	0								
				2	2	.0000	.0004	-.0009	-.0012	-.0453	.1522	
				4	4	.0000	-.0013	-.0017	-.0203	.1103		
				1								
				2	2	-.0000	-.0004	.0007	.0010	.0370	-.1243	
				3	2	-.0000	-.0001	.0002	.0003	.0128	-.0429	
				3	4	.0000	-.0019	-.0024	-.0297	.1614		
				4	4	-.0000	.0006	.0007	.0091	-.0493		
				5	4	-.0000	.0002	.0003	.0038	-.0205		
				5	6	-.0012	.0074	.0070	.3468			
2G	7/2	4S	1/2	0								

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				4	4	.0001	.0014	.0004	.0118	-.1598	
			1								
				3	4	-.0001	-.0020	-.0006	-.0176	.2397	
				4	4	-.0001	-.0015	-.0004	-.0131	.1786	
3D	5/2	3D 5/2	0								
				0	0	.0000	-.0001	-.0001	-.0027	-.0014	-.0281	.2727
				2	2	-.0001	-.0001	-.0013	.0003	-.0077	.1458	
				4	4	.0002	.0003	.0046	.0090	.1227		
			1									
				1	0	.0000	-.0001	-.0001	-.0018	-.0010	-.0192	.1863
				1	2	.0001	.0001	.0008	-.0002	.0044	-.0842	
				3	2	-.0001	-.0002	-.0015	.0004	-.0087	.1653	
				3	4	-.0001	-.0001	-.0016	-.0031	-.0415		
				5	4	.0005	.0007	.0103	.0202	.2743		
3D	5/2	3D 3/2	0									
				2	2	-.0001	-.0001	-.0009	.0002	-.0054	.1030	
				4	4	.0005	.0006	.0092	.0181	.2453		
			1									
				1	0	-.0000	.0001	.0001	.0028	.0015	.0290	-.2816
				1	2	.0001	.0001	.0010	-.0002	.0058	-.1113	
				2	2	-.0001	-.0002	-.0019	.0005	-.0111	.2103	
				3	2	.0001	.0001	.0012	-.0003	.0067	-.1272	
				3	4	-.0002	-.0003	-.0040	-.0079	-.1077		
				4	4	.0005	.0007	.0103	.0202	.2743		
3D	5/2	4S 1/2	0									
				2	2	-.0001	.0002	-.0001	.0068	.0124	.2361	
			1									
				2	2	-.0001	.0001	-.0001	.0055	.0101	.1928	
				3	2	-.0001	.0002	-.0002	.0088	.0160	.3048	
3D	3/2	3D 3/2	0									
				0	0	.0000	-.0001	-.0001	-.0022	-.0012	-.0229	.2226
				2	2	-.0001	-.0001	-.0010	.0002	-.0059	.1113	
			1									
				1	0	-.0000	.0000	.0000	.0010	.0005	.0103	-.0996
				1	2	-.0001	-.0001	-.0014	.0003	-.0083	.1574	
				3	2	.0000	.0000	.0002	-.0001	.0014	-.0275	
				3	4	.0005	.0006	.0093	.0183	.2488		
3D	3/2	4S 1/2	0									
				2	2	.0001	-.0001	.0001	-.0055	-.0101	-.1928	
			1									
				1	2	-.0001	.0002	-.0002	.0088	.0160	.3048	
				2	2	-.0001	.0002	-.0001	.0068	.0124	.2361	
4S	1/2	4S 1/2	0									
				0	0	.0000	.0001	.0006	.0013	.0107	.0243	.2361
			1									
				1	0	.0000	.0001	.0006	.0013	.0107	.0243	.2361

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

NN1= 6 NN2= 7

N L J	N L J	S	J	L	G(1)	G(2)	G(3)	G(4)	G(5)	G(6)	G(7)
		MASS=224 NU= .165									
1I13/2	1J15/2	0									
			1	1	.0000	-.0001	.0010	-.0050	.0150	-.0245	.0170
			3	3	-.0001	.0006	-.0032	.0101	-.0171	.0123	
			5	5	.0004	-.0026	.0094	-.0173	.0131		
			7	7	-.0020	.0098	-.0210	.0174			
			9	9	.0103	-.0295	.0287				
			11	11	-.0450	.0594					
			13	13	.1674						
		1									
			1	1	-.0000	.0001	-.0007	.0036	-.0106	.0173	-.0120
			2	1	.0000	-.0001	.0006	-.0031	.0094	-.0153	.0107
			2	3	.0000	-.0003	.0019	-.0060	.0102	-.0073	
			3	3	.0000	-.0002	.0009	-.0029	.0050	-.0035	
			4	3	-.0000	.0005	-.0027	.0085	-.0145	.0104	
			4	5	-.0002	.0013	-.0048	.0089	-.0067		
			5	5	-.0001	.0005	-.0017	.0032	-.0024		
			6	5	.0004	-.0027	.0096	-.0177	.0134		
			6	7	.0009	-.0043	.0092	-.0076			
			7	7	.0003	-.0013	.0028	-.0023			
			8	7	-.0025	.0121	-.0259	.0215			
			8	9	-.0037	.0107	-.0104				
			9	9	-.0011	.0031	-.0030				
			10	9	.0157	-.0453	.0440				
			10	11	.0127	-.0168					
			11	11	.0039	-.0052					
			12	11	-.0933	.1230					
			12	13	-.0322						
			13	13	-.0124						
			14	13	.6247						
1I13/2	1J13/2	0									
			1	1	.0000	-.0000	.0001	-.0005	.0015	-.0024	.0017
			3	3	-.0000	.0001	-.0008	.0025	-.0042	.0030	
			5	5	.0001	-.0011	.0038	-.0071	.0053		
			7	7	-.0012	.0059	-.0127	.0105			
			9	9	.0089	-.0255	.0248				
			11	11	-.0586	.0773					
			13	13	.4267						
		1									
			0	1	-.0000	.0002	-.0014	.0069	-.0205	.0335	-.0233
			1	1	.0000	-.0001	.0010	-.0049	.0145	-.0238	.0165
			2	1	-.0000	.0000	-.0004	.0022	-.0064	.0105	-.0073
			2	3	.0000	-.0005	.0028	-.0088	.0149	-.0107	
			3	3	-.0001	.0006	-.0032	.0100	-.0171	.0122	
			4	3	.0000	-.0003	.0018	-.0055	.0094	-.0067	
			4	5	-.0003	.0021	-.0075	.0138	-.0104		
			5	5	.0004	-.0027	.0098	-.0180	.0136		
			6	5	-.0002	.0015	-.0055	.0101	-.0076		
			6	7	.0016	-.0075	.0161	-.0134			
			7	7	-.0023	.0111	-.0237	.0197			
			8	7	.0012	-.0058	.0125	-.0104			
			8	9	-.0077	.0221	-.0215				
			9	9	.0131	-.0377	.0366				
			10	9	-.0060	.0173	-.0168				
			10	11	.0334	-.0440					

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			11	11	-.0714	.0941				
			12	11	.0244	-.0322				
			12	13	-.1230					
			13	13	.4429					
1I13/2	2H11/2	0								
			1	1	-.0000	.0001	-.0004	-.0017	.0161	-.0444	.0433
			3	3	.0001	-.0003	-.0007	.0099	-.0302	.0311	
			5	5	-.0003	.0002	.0074	-.0286	.0329		
			7	7	.0012	.0042	-.0306	.0432			
			9	9	-.0032	-.0308	.0688				
			11	11	.0040	.1302					
		1									
			1	1	-.0000	.0001	-.0003	-.0012	.0114	-.0314	.0307
			2	1	-.0000	.0001	-.0003	-.0011	.0103	-.0284	.0277
			2	3	-.0000	.0002	.0004	-.0057	.0174	-.0180	
			3	3	.0000	-.0001	-.0002	.0029	-.0087	.0090	
			4	3	.0001	-.0003	-.0006	.0088	-.0268	.0276	
			4	5	.0002	-.0001	-.0036	.0139	-.0160		
			5	5	-.0001	.0000	.0014	-.0052	.0060		
			6	5	-.0004	.0002	.0082	-.0316	.0363		
			6	7	-.0005	-.0017	.0122	-.0172			
			7	7	.0002	.0006	-.0041	.0058			
			8	7	.0017	.0059	-.0426	.0603			
			8	9	.0010	.0095	-.0212				
			9	9	-.0003	-.0032	.0072				
			10	9	-.0061	-.0585	.1307				
			10	11	-.0008	-.0271					
			11	11	.0003	.0113					
			12	11	.0136	.4495					
1I13/2	2H 9/2	0									
			3	3	.0000	-.0001	-.0002	.0026	-.0080	.0082	
			5	5	-.0002	.0001	.0035	-.0135	.0155		
			7	7	.0009	.0031	-.0225	.0318			
			9	9	-.0037	-.0355	.0794				
			11	11	.0092	.3030					
		1									
			2	1	.0000	-.0001	.0004	.0018	-.0168	.0463	-.0453
			2	3	-.0000	.0001	.0002	-.0035	.0107	-.0110	
			3	3	.0001	-.0003	-.0006	.0091	-.0276	.0284	
			4	3	-.0001	.0003	.0006	-.0085	.0260	-.0268	
			4	5	.0002	-.0001	-.0037	.0144	-.0165		
			5	5	-.0003	.0002	.0077	-.0296	.0340		
			6	5	.0003	-.0001	-.0058	.0225	-.0258		
			6	7	-.0007	-.0024	.0171	-.0242			
			7	7	.0014	.0050	-.0360	.0509			
			8	7	-.0009	-.0031	.0222	-.0315			
			8	9	.0019	.0182	-.0406				
			9	9	-.0047	-.0449	.1004				
			10	9	.0021	.0199	-.0445				
			10	11	-.0024	-.0796					
			11	11	.0096	.3165					
1I13/2	3F 7/2	0									
			3	3	.0000	-.0004	.0015	.0065	-.0446	.0661	
			5	5	-.0001	.0014	.0019	-.0321	.0576		
			7	7	.0009	-.0026	-.0256	.0706			
			9	9	-.0034	-.0045	.1012				
		1									
			3	3	.0000	-.0004	.0013	.0056	-.0386	.0572	
			4	3	.0000	-.0003	.0010	.0042	-.0288	.0427	
			4	5	.0001	-.0005	-.0007	.0117	-.0210		
			5	5	-.0001	.0008	.0011	-.0176	.0316		
			6	5	-.0002	.0015	.0021	-.0348	.0625		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			6	7	-.0003	.0008	.0080	-.0221		
			7	7	.0003	-.0011	-.0103	.0283		
			8	7	.0014	-.0042	-.0410	.1130		
			8	9	.0007	.0010	-.0220			
			9	9	-.0011	-.0014	.0320			
			10	9	-.0102	-.0137	.3053			
1I13/2	3F 5/2	0								
			5	5	-.0001	.0007	.0009	-.0152	.0273	
			7	7	.0008	-.0024	-.0231	.0637		
			9	9	-.0067	-.0089	.1999			
		1								
			4	3	-.0000	.0005	-.0017	-.0075	.0515	-.0763
			4	5	.0000	-.0003	-.0004	.0066	-.0118	
			5	5	-.0001	.0012	.0017	-.0278	.0499	
			6	5	.0001	-.0014	-.0018	.0308	-.0554	
			6	7	-.0003	.0009	.0090	-.0249		
			7	7	.0010	-.0032	-.0309	.0852		
			8	7	-.0007	.0021	.0206	-.0568		
			8	9	.0015	.0020	-.0437			
			9	9	-.0070	-.0094	.2107			
1I13/2	4P 3/2	0								
			5	5	-.0001	.0016	-.0020	-.0347	.0907	
			7	7	.0005	-.0039	-.0144	.0839		
		1								
			5	5	-.0000	.0015	-.0018	-.0317	.0828	
			6	5	-.0000	.0014	-.0017	-.0291	.0761	
			6	7	-.0001	.0007	.0026	-.0152		
			7	7	.0003	-.0026	-.0096	.0560		
			8	7	.0010	-.0086	-.0318	.1851		
1I13/2	4P 1/2	0								
			7	7	.0006	-.0050	-.0184	.1069		
		1								
			6	5	.0001	-.0017	.0021	.0369	-.0963	
			6	7	-.0001	.0006	.0021	-.0120		
			7	7	.0006	-.0053	-.0197	.1143		
1I11/2	1J15/2	0								
			3	3	.0000	-.0001	.0007	-.0023	.0039	-.0028
			5	5	-.0001	.0010	-.0037	.0068	-.0052	
			7	7	.0012	-.0058	.0124	-.0103		
			9	9	-.0088	.0253	-.0246			
			11	11	.0582	-.0767				
			13	13	-.4244					
		1								
			2	1	.0000	-.0001	.0010	-.0053	.0158	-.0258 .0179
			2	3	-.0000	.0002	-.0011	.0036	-.0061	.0044
			3	3	-.0000	.0005	-.0029	.0092	-.0156	.0111
			4	3	-.0000	.0005	-.0028	.0088	-.0149	.0107
			4	5	.0002	-.0013	.0047	-.0087	.0066	
			5	5	.0004	-.0026	.0094	-.0174	.0132	
			6	5	.0003	-.0021	.0075	-.0138	.0104	
			6	7	-.0011	.0055	-.0118	.0098		
			7	7	-.0023	.0109	-.0233	.0193		
			8	7	-.0015	.0074	-.0158	.0131		
			8	9	.0061	-.0175	.0170			
			9	9	.0130	-.0373	.0362			
			10	9	.0073	-.0209	.0203			
			10	11	-.0276	.0363				
			11	11	-.0709	.0934				
			12	11	-.0286	.0378				
			12	13	.1048					
			13	13	.4404					
1I11/2	1J13/2	0								

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			1	1	.0000	-.0001	.0009	-.0047	.0139	-.0228	.0158
			3	3	-.0000	.0005	-.0029	.0093	-.0159	.0114	
			5	5	.0003	-.0024	.0086	-.0159	.0120		
			7	7	-.0019	.0089	-.0190	.0158			
			9	9	.0090	-.0258	.0251				
			11	11	-.0361	.0475					
		1									
			1	1	.0000	-.0001	.0007	-.0033	.0099	-.0161	.0112
			2	1	-.0000	.0000	-.0004	.0022	-.0065	.0107	-.0074
			2	3	-.0000	.0005	-.0027	.0086	-.0147	.0105	
			3	3	-.0000	.0002	-.0009	.0027	-.0046	.0033	
			4	3	.0000	-.0002	.0014	-.0044	.0075	-.0053	
			4	5	.0004	-.0026	.0094	-.0174	.0132		
			5	5	.0001	-.0004	.0016	-.0029	.0022		
			6	5	-.0001	.0010	-.0035	.0065	-.0049		
			6	7	-.0025	.0118	-.0252	.0209			
			7	7	-.0002	.0012	-.0025	.0021			
			8	7	.0006	-.0030	.0063	-.0052			
			8	9	.0152	-.0438	.0426				
			9	9	.0009	-.0027	.0026				
			10	9	-.0022	.0064	-.0062				
			10	11	-.0900	.1187					
			11	11	-.0031	.0041					
			12	11	.0050	-.0066					
			12	13	.6026						
1I11/2	2H11/2	0									
			1	1	.0000	-.0000	.0000	.0002	-.0018	.0051	-.0049
			3	3	-.0000	.0001	.0002	-.0029	.0087	-.0090	
			5	5	.0002	-.0001	-.0036	.0140	-.0160		
			7	7	-.0009	-.0032	.0229	-.0323			
			9	9	.0037	.0359	-.0803				
			11	11	-.0093	-.3054					
		1									
			0	1	-.0000	.0002	-.0005	-.0023	.0220	-.0605	.0591
			1	1	-.0000	.0001	-.0004	-.0017	.0156	-.0429	.0419
			2	1	-.0000	.0001	-.0002	-.0007	.0069	-.0189	.0185
			2	3	.0001	-.0003	-.0006	.0086	-.0262	.0269	
			3	3	.0001	-.0003	-.0007	.0099	-.0302	.0311	
			4	3	.0000	-.0002	-.0004	.0054	-.0164	.0169	
			4	5	-.0003	.0001	.0059	-.0227	.0261		
			5	5	-.0004	.0002	.0080	-.0306	.0352		
			6	5	-.0002	.0001	.0043	-.0164	.0189		
			6	7	.0009	.0032	-.0234	.0330			
			7	7	.0014	.0051	-.0367	.0519			
			8	7	.0007	.0024	-.0175	.0248			
			8	9	-.0024	-.0230	.0515				
			9	9	-.0047	-.0454	.1016				
			10	9	-.0017	-.0164	.0367				
			10	11	.0029	.0964					
			11	11	.0097	.3190					
1I11/2	2H 9/2	0									
			1	1	-.0000	.0001	-.0004	-.0016	.0148	-.0408	.0398
			3	3	.0001	-.0003	-.0006	.0091	-.0276	.0284	
			5	5	-.0003	.0002	.0067	-.0257	.0296		
			7	7	.0011	.0037	-.0266	.0377			
			9	9	-.0026	-.0245	.0548				
		1									
			1	1	.0000	-.0001	.0003	.0011	-.0105	.0288	-.0282
			2	1	.0000	-.0001	.0002	.0007	-.0067	.0186	-.0182
			2	3	.0001	-.0003	-.0006	.0088	-.0266	.0274	
			3	3	-.0000	.0001	.0002	-.0026	.0080	-.0082	
			4	3	-.0000	.0001	.0003	-.0040	.0122	-.0125	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				4	5	-.0004	.0002	.0080	-.0307	.0353
				5	5	.0001	-.0000	-.0012	.0047	-.0054
				6	5	.0001	-.0001	-.0024	.0094	-.0108
				6	7	.0016	.0057	-.0411	.0581	
				7	7	-.0001	-.0005	.0036	-.0050	
				8	7	-.0003	-.0010	.0072	-.0102	
				8	9	-.0059	-.0561	.1254		
				9	9	.0003	.0026	-.0058		
				10	9	.0004	.0037	-.0082		
				10	11	.0131	.4309			
1I11/2	3F 7/2	0								
				3	3	-.0000	.0001	-.0004	-.0016	.0110 -.0164
				5	5	.0001	-.0008	-.0011	.0176	-.0316
				7	7	-.0008	.0025	.0247	-.0679	
				9	9	.0069	.0093	-.2074		
			1							
				2	3	.0000	-.0006	.0020	.0089	-.0608 .0901
				3	3	.0000	-.0003	.0011	.0047	-.0319 .0472
				4	3	.0000	-.0001	.0003	.0014	-.0097 .0144
				4	5	-.0002	.0015	.0021	-.0347	.0622
				5	5	-.0001	.0014	.0019	-.0321	.0576
				6	5	-.0000	.0005	.0007	-.0113	.0202
				6	7	.0008	-.0025	-.0248	.0682	
				7	7	.0011	-.0034	-.0330	.0908	
				8	7	.0003	-.0010	-.0098	.0271	
				8	9	-.0031	-.0041	.0916		
				9	9	-.0073	-.0098	.2186		
1I11/2	3F 5/2	0								
				3	3	.0000	-.0004	.0013	.0058	-.0398 .0590
				5	5	-.0001	.0012	.0017	-.0278	.0499
				7	7	.0007	-.0021	-.0203	.0560	
			1							
				3	3	-.0000	.0003	-.0012	-.0050	.0345 -.0511
				4	3	-.0000	.0001	-.0004	-.0016	.0109 -.0161
				4	5	-.0001	.0014	.0019	-.0310	.0557
				5	5	.0001	-.0007	-.0009	.0152	-.0273
				6	5	.0000	-.0003	-.0004	.0073	-.0131
				6	7	.0013	-.0039	-.0381	.1050	
				7	7	-.0003	.0008	.0082	-.0225	
				8	7	-.0001	.0003	.0031	-.0086	
				8	9	-.0096	-.0128	.2871		
1I11/2	4P 3/2	0								
				5	5	.0000	-.0008	.0010	.0169	-.0442
				7	7	-.0007	.0059	.0216	-.1258	
			1							
				4	5	-.0001	.0022	-.0027	-.0473	.1235
				5	5	-.0000	.0012	-.0014	-.0247	.0646
				6	5	-.0000	.0002	-.0003	-.0045	.0119
				6	7	.0006	-.0046	-.0168	.0978	
				7	7	.0008	-.0063	-.0231	.1345	
1I11/2	4P 1/2	0								
				5	5	-.0000	.0013	-.0016	-.0273	.0713
			1							
				5	5	.0000	-.0012	.0014	.0249	-.0651
				6	5	.0000	-.0001	.0002	.0028	-.0074
				6	7	.0009	-.0073	-.0268	.1560	
2G 9/2	1J15/2	0								
				3	3	.0000	-.0001	-.0022	.0148	-.0388 .0374
				5	5	-.0001	-.0009	.0100	-.0311	.0331
				7	7	.0002	.0071	-.0328	.0418	
				9	9	.0010	-.0352	.0655		
				11	11	-.0112	.1231			

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

		1								
			3	3	-.0000	.0001	.0019	-.0128	.0336	-.0324
			4	3	.0000	-.0000	-.0013	.0090	-.0235	.0227
			4	5	.0001	.0003	-.0040	.0124	-.0131	
			5	5	.0001	.0005	-.0055	.0170	-.0181	
			6	5	-.0001	-.0008	.0097	-.0301	.0321	
			6	7	-.0001	-.0026	.0119	-.0152		
			7	7	-.0001	-.0028	.0131	-.0168		
			8	7	.0003	.0093	-.0427	.0545		
			8	9	-.0003	.0103	-.0192			
			9	9	-.0003	.0111	-.0207			
			10	9	.0019	-.0641	.1194			
			10	11	.0023	-.0247				
			11	11	.0029	-.0322				
			12	11	-.0376	.4130				
2G	9/2	1J13/2	0							
			3	3	.0000	-.0000	-.0004	.0030	-.0079	.0076
			5	5	-.0001	-.0004	.0044	-.0136	.0144	
			7	7	.0002	.0050	-.0232	.0296		
			9	9	.0011	-.0397	.0739			
			11	11	-.0257	.2821				
		1								
			2	3	-.0001	.0001	.0030	-.0203	.0531	-.0512
			3	3	.0000	-.0000	-.0015	.0105	-.0274	.0264
			4	3	-.0000	.0000	.0005	-.0033	.0086	-.0083
			4	5	.0002	.0009	-.0108	.0337	-.0359	
			5	5	-.0001	-.0008	.0095	-.0297	.0316	
			6	5	.0001	.0003	-.0036	.0113	-.0120	
			6	7	-.0002	-.0069	.0318	-.0405		
			7	7	.0003	.0081	-.0372	.0474		
			8	7	-.0001	-.0030	.0138	-.0176		
			8	9	-.0009	.0319	-.0594			
			9	9	.0015	-.0502	.0935			
			10	9	-.0004	.0148	-.0276			
			10	11	.0097	-.1070				
			11	11	-.0268	.2947				
2G	9/2	2H11/2	0							
			1	1	.0000	-.0002	.0002	.0004	.0115	-.0682	.1015
			3	3	-.0001	.0003	.0004	.0056	-.0441	.0724	
			5	5	.0005	.0001	.0017	-.0368	.0754	
			7	7	-.0017	-.0025	-.0275	.0961		
			9	9	.0049	.0063	.1398			
		1								
			1	1	-.0000	.0001	-.0002	-.0003	-.0081	.0482	-.0718
			2	1	.0000	-.0001	.0002	.0003	.0076	-.0449	.0668
			2	3	.0001	-.0002	-.0002	-.0031	.0243	-.0400	
			3	3	.0000	-.0001	-.0001	-.0016	.0127	-.0209	
			4	3	-.0001	.0003	.0004	.0053	-.0417	.0684	
			4	5	-.0002	-.0001	-.0008	.0164	-.0337		
			5	5	-.0001	-.0000	-.0003	.0067	-.0138		
			6	5	.0006	.0002	.0021	-.0454	.0932		
			6	7	.0006	.0009	.0094	-.0329			
			7	7	.0002	.0003	.0037	-.0128			
			8	7	-.0029	-.0043	-.0472	.1646			
			8	9	-.0011	-.0014	-.0320				
			9	9	-.0005	-.0007	-.0147				
			10	9	.0153	.0197	.4400				
2G	9/2	2H 9/2	0							
			1	1	.0000	-.0000	.0000	.0001	.0016	-.0093	.0138
			3	3	-.0000	.0001	.0001	.0020	-.0154	.0253	
			5	5	.0003	.0001	.0011	-.0225	.0462		
			7	7	-.0017	-.0025	-.0280	.0978			

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				9	9	.0103	.0133	.2966			
			1								
				0	1	-.0000	.0003	-.0003	-.0005	-.0156	.0923	-.1375
				1	1	.0000	-.0002	.0002	.0004	.0111	-.0656	.0977
				2	1	-.0000	.0001	-.0001	-.0002	-.0049	.0288	-.0428
				2	3	.0001	-.0003	-.0003	-.0049	.0380	-.0624	
				3	3	-.0001	.0003	.0004	.0057	-.0445	.0731	
				4	3	.0001	-.0002	-.0002	-.0030	.0236	-.0387	
				4	5	-.0004	-.0001	-.0014	.0291	-.0596		
				5	5	.0006	.0002	.0019	-.0411	.0844		
				6	5	-.0003	-.0001	-.0010	.0204	-.0419		
				6	7	.0013	.0019	.0210	-.0732			
				7	7	-.0023	-.0034	-.0375	.1307			
				8	7	.0009	.0013	.0144	-.0503			
				8	9	-.0036	-.0047	-.1045				
				9	9	.0109	.0140	.3127				
2G	9/2	3F	7/2	0								
				1	1	-.0000	.0000	.0005	.0002	-.0000	-.0634	.1652
				3	3	.0001	.0003	-.0004	-.0017	-.0364	.1165	
				5	5	-.0002	-.0013	-.0028	-.0205	.1178		
				7	7	.0001	.0034	.0079	.1374			
			1									
				1	1	-.0000	.0000	.0004	.0001	-.0000	-.0448	.1168
				2	1	-.0000	.0000	.0003	.0001	-.0000	-.0435	.1135
				2	3	-.0000	-.0001	.0002	.0009	.0188	-.0601	
				3	3	.0000	.0001	-.0001	-.0005	-.0105	.0336	
				4	3	.0001	.0003	-.0004	-.0018	-.0379	.1212	
				4	5	.0001	.0005	.0011	.0080	-.0460		
				5	5	-.0000	-.0002	-.0005	-.0037	.0215		
				6	5	-.0002	-.0020	-.0042	-.0307	.1764		
				6	7	-.0000	-.0009	-.0020	-.0353			
				7	7	.0000	.0005	.0011	.0184			
				8	7	.0004	.0096	.0221	.3857			
2G	9/2	3F	5/2	0								
				3	3	.0000	.0001	-.0002	-.0007	-.0149	.0475	
				5	5	-.0001	-.0011	-.0023	-.0167	.0962		
				7	7	.0003	.0063	.0145	.2525			
			1									
				2	1	.0000	-.0000	-.0005	-.0002	.0001	.0643	-.1676
				2	3	-.0000	-.0001	.0001	.0006	.0127	-.0407	
				3	3	.0001	.0003	-.0004	-.0016	-.0343	.1098	
				4	3	-.0001	-.0002	.0003	.0014	.0297	-.0951	
				4	5	.0001	.0007	.0014	.0102	-.0586		
				5	5	-.0002	-.0016	-.0033	-.0244	.1405		
				6	5	.0001	.0009	.0019	.0142	-.0815		
				6	7	-.0001	-.0019	-.0044	-.0764			
				7	7	.0003	.0067	.0155	.2699			
2G	9/2	4P	3/2	0								
				3	3	.0001	-.0001	-.0012	-.0037	-.0258	.1743	
				5	5	-.0002	-.0006	.0003	.0000	.1355		
			1									
				3	3	.0001	-.0001	-.0011	-.0032	-.0224	.1510	
				4	3	.0001	-.0001	-.0010	-.0031	-.0218	.1472	
				4	5	.0000	.0001	-.0001	-.0000	-.0330		
				5	5	-.0001	-.0003	.0002	.0000	.0742		
				6	5	-.0004	-.0012	.0006	.0000	.2875		
2G	9/2	4P	1/2	0								
				5	5	-.0002	-.0007	.0004	.0000	.1660		
			1									
				4	3	-.0001	.0001	.0012	.0038	.0263	-.1775	
				4	5	.0000	.0001	-.0001	-.0000	-.0274		
				5	5	-.0003	-.0008	.0004	.0000	.1819		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

2G 7/2	1J15/2	0								
			5	5	.0001	.0003	-.0038	.0117	-.0125	
			7	7	-.0002	-.0047	.0217	-.0277		
			9	9	-.0011	.0382	-.0712			
			11	11	.0251	-.2753				
		1								
			4	3	.0001	-.0001	-.0026	.0174	-.0456	.0440
			4	5	-.0000	-.0002	.0020	-.0064	.0068	
			5	5	-.0001	-.0007	.0083	-.0257	.0274	
			6	5	-.0001	-.0009	.0099	-.0309	.0329	
			6	7	.0001	.0025	-.0116	.0148		
			7	7	.0002	.0076	-.0349	.0445		
			8	7	.0002	.0063	-.0289	.0368		
			8	9	.0004	-.0152	.0283			
			9	9	.0014	-.0484	.0901			
			10	9	.0008	-.0267	.0498			
			10	11	-.0054	.0593				
			11	11	-.0262	.2876				
2G 7/2	1J13/2	0								
			3	3	.0000	-.0001	-.0020	.0135	-.0354	.0341
			5	5	-.0001	-.0008	.0090	-.0280	.0298	
			7	7	.0002	.0062	-.0286	.0365		
			9	9	.0008	-.0281	.0523			
		1								
			3	3	.0000	-.0000	-.0017	.0117	-.0306	.0296
			4	3	-.0000	.0000	.0006	-.0041	.0107	-.0103
			4	5	-.0001	-.0008	.0087	-.0272	.0290	
			5	5	-.0001	-.0004	.0049	-.0153	.0163	
			6	5	.0000	.0002	-.0029	.0089	-.0095	
			6	7	.0003	.0087	-.0402	.0513		
			7	7	.0001	.0025	-.0115	.0146		
			8	7	-.0001	-.0016	.0072	-.0092		
			8	9	.0018	-.0609	.1134			
			9	9	.0003	-.0089	.0165			
			10	9	-.0001	.0040	-.0075			
			10	11	-.0358	.3937				
2G 7/2	2H11/2	0								
			3	3	.0000	-.0001	-.0001	-.0018	.0141	-.0231
			5	5	-.0003	-.0001	-.0010	.0217	-.0446	
			7	7	.0017	.0025	.0275	-.0961		
			9	9	-.0102	-.0131	-.2933			
		1								
			2	1	.0000	-.0002	.0002	.0004	.0119	-.0704	.1049
			2	3	-.0000	.0001	.0001	.0020	-.0155	.0255	
			3	3	-.0001	.0003	.0004	.0052	-.0407	.0668	
			4	3	-.0001	.0002	.0003	.0048	-.0373	.0612	
			4	5	.0003	.0001	.0009	-.0184	.0377	
			5	5	.0005	.0002	.0019	-.0397	.0815	
			6	5	.0004	.0001	.0013	-.0279	.0572	
			6	7	-.0009	-.0014	-.0154	.0536		
			7	7	-.0022	-.0033	-.0368	.1284		
			8	7	-.0011	-.0017	-.0183	.0638		
			8	9	.0029	.0037	.0825			
			9	9	.0108	.0138	.3092			
2G 7/2	2H 9/2	0								
			1	1	.0000	-.0002	.0002	.0004	.0104	-.0616	.0917
			3	3	-.0001	.0003	.0004	.0050	-.0393	.0646	
			5	5	.0004	.0001	.0015	-.0318	.0653	
			7	7	-.0013	-.0020	-.0219	.0762		
		1								
			1	1	.0000	-.0001	.0002	.0003	.0074	-.0435	.0648
			2	1	-.0000	.0001	-.0001	-.0002	-.0045	.0269	-.0400

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			2	3	-.0001	.0003	.0004	.0052	-.0406	.0667
			3	3	-.0000	.0001	.0001	.0015	-.0114	.0186
			4	3	.0000	-.0001	-.0001	-.0020	.0157	-.0259
			4	5	.0006	.0002	.0020	-.0435	.0893	
			5	5	.0001	.0000	.0003	-.0058	.0119	
			6	5	-.0001	-.0000	-.0004	.0095	-.0196	
			6	7	-.0027	-.0041	-.0449	.1566		
			7	7	-.0002	-.0003	-.0029	.0102		
			8	7	.0002	.0003	.0036	-.0126		
			8	9	.0146	.0187	.4181			
2G	7/2	3F 7/2	0							
			1	1	.0000	-.0000	-.0001	-.0000	.0000	.0107	-.0279
			3	3	-.0000	-.0001	.0002	.0008	.0163	-.0521
			5	5	.0001	.0011	.0024	.0173	-.0996	
			7	7	-.0003	-.0064	-.0147	-.2571		
			1							
			0	1	-.0000	.0001	.0007	.0003	-.0001	-.0851	.2217
			1	1	-.0000	.0000	.0005	.0002	-.0000	-.0606	.1580
			2	1	-.0000	.0000	.0002	.0001	-.0000	-.0263	.0684
			2	3	.0001	.0002	-.0003	-.0015	-.0312	.0997	
			3	3	.0001	.0003	-.0004	-.0018	-.0376	.1203	
			4	3	.0000	.0001	-.0002	-.0009	-.0188	.0601	
			4	5	-.0001	-.0010	-.0022	-.0161	.0927	
			5	5	-.0002	-.0016	-.0034	-.0253	.1454	
			6	5	-.0001	-.0007	-.0014	-.0104	.0596	
			6	7	.0001	.0026	.0060	.1044		
			7	7	.0003	.0069	.0158	.2749		
2G	7/2	3F 5/2	0							
			1	1	-.0000	.0000	.0004	.0002	-.0000	-.0557	.1451
			3	3	.0001	.0002	-.0003	-.0015	-.0312	.0997	
			5	5	-.0001	-.0010	-.0022	-.0161	.0927	
			1							
			1	1	.0000	-.0000	-.0003	-.0001	.0000	.0394	-.1026
			2	1	.0000	-.0000	-.0002	-.0001	.0000	.0227	-.0592
			2	3	.0001	.0003	-.0004	-.0017	-.0360	.1152	
			3	3	-.0000	-.0001	.0001	.0004	.0090	-.0288	
			4	3	-.0000	-.0001	.0001	.0005	.0105	-.0336	
			4	5	-.0002	-.0019	-.0039	-.0289	.1658	
			5	5	.0000	.0002	.0004	.0029	-.0169	
			6	5	.0000	.0002	.0004	.0030	-.0172	
			6	7	.0004	.0090	.0207	.3616		
2G	7/2	4P 3/2	0							
			3	3	-.0000	.0000	.0005	.0017	.0115	-.0780	
			5	5	.0003	.0008	-.0004	-.0000	-.1917	
			1							
			2	3	.0001	-.0001	-.0016	-.0050	-.0346	.2339	
			3	3	.0001	-.0001	-.0009	-.0029	-.0200	.1350	
			4	3	.0000	-.0000	-.0002	-.0007	-.0050	.0335	
			4	5	-.0002	-.0006	.0003	.0000	.1448	
			5	5	-.0003	-.0009	.0005	.0000	.2100	
2G	7/2	4P 1/2	0							
			3	3	.0001	-.0001	-.0009	-.0029	-.0200	.1350	
			1							
			3	3	-.0001	.0000	.0008	.0025	.0173	-.1169	
			4	3	-.0000	.0000	.0001	.0004	.0029	-.0198	
			4	5	-.0004	-.0010	.0005	.0000	.2447	
3D	5/2	1J15/2	0							
			5	5	-.0002	.0004	.0087	-.0461	.0662	
			7	7	.0006	.0025	-.0345	.0668		
			9	9	-.0014	-.0205	.0915			
			1							
			5	5	.0002	-.0004	-.0079	.0421	-.0604	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

			6	5	-.0001	.0003	.0060	-.0319	.0458		
			6	7	-.0002	-.0006	.0084	-.0162			
			7	7	-.0004	-.0017	.0230	-.0447			
			8	7	.0009	.0034	-.0465	.0901			
			8	9	.0003	.0039	-.0175				
			9	9	.0007	.0108	-.0482				
			10	9	-.0039	-.0560	.2505				
3D	5/2	1J13/2	0								
			5	5	-.0001	.0001	.0031	-.0163	.0234		
			7	7	.0005	.0021	-.0282	.0546			
			9	9	-.0027	-.0383	.1711				
			1								
			4	5	.0003	-.0006	-.0119	.0631	-.0907		
			5	5	-.0001	.0003	.0056	-.0297	.0427		
			6	5	.0000	-.0001	-.0012	.0066	-.0095		
			6	7	-.0008	-.0030	.0404	-.0782			
			7	7	.0007	.0028	-.0376	.0729			
			8	7	-.0002	-.0006	.0084	-.0162			
			8	9	.0015	.0218	-.0972				
			9	9	-.0028	-.0404	.1804				
3D	5/2	2H11/2	0								
			3	3	-.0000	.0006	-.0004	.0008	-.0523	.1383	
			5	5	.0002	-.0012	-.0016	-.0285	.1170		
			7	7	-.0009	.0018	-.0025	.1314			
			1								
			3	3	.0000	-.0005	.0004	-.0007	.0453	-.1198	
			4	3	-.0000	.0004	-.0003	.0006	-.0372	.0983	
			4	5	-.0001	.0004	.0005	.0091	-.0373		
			5	5	-.0001	.0007	.0009	.0156	-.0641		
			6	5	.0003	-.0016	-.0020	-.0375	.1540		
			6	7	.0002	-.0004	.0006	-.0308			
			7	7	.0004	-.0007	.0010	-.0527			
			8	7	-.0024	.0047	-.0066	.3445			
3D	5/2	2H 9/2	0								
			3	3	-.0000	.0002	-.0001	.0003	-.0166	.0437	
			5	5	.0002	-.0009	-.0012	-.0216	.0885		
			7	7	-.0016	.0032	-.0044	.2322			
			1								
			2	3	.0000	-.0008	.0006	-.0011	.0709	-.1873	
			3	3	-.0000	.0004	-.0003	.0006	-.0382	.1010	
			4	3	.0000	-.0001	.0001	-.0002	.0110	-.0292	
			4	5	-.0002	.0013	.0017	.0307	-.1258		
			5	5	.0002	-.0014	-.0017	-.0315	.1292		
			6	5	-.0001	.0004	.0005	.0091	-.0375		
			6	7	.0009	-.0017	.0024	-.1265			
			7	7	-.0017	.0034	-.0047	.2483			
3D	5/2	3F 7/2	0								
			1	1	.0000	-.0000	.0001	-.0023	-.0031	-.0385	.2407
			3	3	-.0001	-.0002	-.0016	-.0010	-.0136	.1654	
			5	5	.0002	.0003	.0051	.0107	.1537		
			1								
			1	1	-.0000	.0000	-.0000	.0016	.0022	.0272	-.1702
			2	1	.0000	-.0000	.0000	-.0017	-.0023	-.0283	.1769
			2	3	.0000	.0001	.0007	.0004	.0063	-.0764	
			3	3	.0000	.0001	.0005	.0003	.0039	-.0477	
			4	3	-.0001	-.0002	-.0020	-.0012	-.0168	.2044	
			4	5	-.0001	-.0001	-.0015	-.0032	-.0458		
			5	5	-.0000	-.0001	-.0009	-.0020	-.0281		
			6	5	.0005	.0008	.0124	.0258	.3712		
3D	5/2	3F 5/2	0								
			1	1	.0000	-.0000	.0000	-.0005	-.0007	-.0086	.0538
			3	3	-.0001	-.0001	-.0010	-.0006	-.0086	.1046	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				5	5	.0004	.0005	.0081	.0169	.2430	
			1								
				0	1	-.0001	.0000	-.0001	.0030	.0041	.0509	-.3184
				1	1	.0000	-.0000	.0001	-.0021	-.0030	-.0365	.2283
				2	1	-.0000	.0000	-.0000	.0009	.0012	.0154	-.0963
				2	3	.0001	.0002	.0014	.0008	.0115	-.1403	
				3	3	-.0001	-.0002	-.0018	-.0011	-.0149	.1812	
				4	3	.0000	.0001	.0008	.0005	.0064	-.0780	
				4	5	-.0002	-.0003	-.0040	-.0084	-.1201		
				5	5	.0004	.0006	.0089	.0185	.2662		
3D	5/2	4P	3/2	0								
				1	1	-.0000	-.0001	-.0002	-.0014	.0022	-.0000	.2726
				3	3	.0000	.0002	.0005	.0057	.0143	.1735	
			1									
				1	1	-.0000	-.0001	-.0002	-.0010	.0016	-.0000	.1928
				2	1	-.0000	-.0001	-.0002	-.0012	.0019	-.0000	.2281
				2	3	-.0000	-.0001	-.0002	-.0021	-.0052	-.0633	
				3	3	.0000	.0001	.0001	.0016	.0041	.0501	
				4	3	.0000	.0004	.0010	.0110	.0276	.3359	
3D	5/2	4P	1/2	0								
				3	3	.0000	.0002	.0006	.0064	.0160	.1939	
			1									
				2	1	.0000	.0001	.0002	.0012	-.0020	.0000	-.2439
				2	3	-.0000	-.0001	-.0002	-.0019	-.0049	-.0592	
				3	3	.0000	.0002	.0006	.0074	.0184	.2239	
3D	3/2	1J	15/2	0								
				7	7	-.0005	-.0018	.0239	-.0464			
				9	9	.0025	.0354	-.1584				
			1									
				6	5	-.0002	.0005	.0101	-.0536	.0770		
				6	7	.0001	.0004	-.0050	.0096			
				7	7	.0006	.0024	-.0320	.0620			
				8	7	.0006	.0024	-.0326	.0631			
				8	9	-.0004	-.0056	.0250				
				9	9	-.0026	-.0374	.1670				
3D	3/2	1J	13/2	0								
				5	5	-.0002	.0004	.0075	-.0399	.0573		
				7	7	.0005	.0020	-.0274	.0530			
			1									
				5	5	-.0002	.0003	.0068	-.0364	.0523		
				6	5	.0000	-.0001	-.0013	.0067	-.0096		
				6	7	.0007	.0029	-.0398	.0770			
				7	7	.0003	.0014	-.0183	.0354			
				8	7	-.0001	-.0003	.0036	-.0069			
				8	9	-.0036	-.0512	.2289				
3D	3/2	2H	11/2	0								
				5	5	-.0001	.0008	.0010	.0187	-.0766		
				7	7	.0015	-.0030	.0042	-.2179			
			1									
				4	3	-.0000	.0006	-.0005	.0009	-.0584	.1543	
				4	5	.0000	-.0003	-.0003	-.0058	.0238		
				5	5	.0002	-.0012	-.0015	-.0273	.1119		
				6	5	.0002	-.0011	-.0014	-.0250	.1026		
				6	7	-.0003	.0006	-.0009	.0462			
				7	7	-.0016	.0032	-.0045	.2329			
3D	3/2	2H	9/2	0								
				3	3	-.0000	.0005	-.0004	.0007	-.0448	.1184	
				5	5	.0002	-.0010	-.0012	-.0224	.0921		
			1									
				3	3	-.0000	.0004	-.0003	.0006	-.0388	.1026	
				4	3	.0000	-.0001	.0001	-.0002	.0103	-.0273	
				4	5	.0002	-.0014	-.0018	-.0328	.1345		

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				5	5	.0001	-.0005	-.0007	-.0123	.0504	
				6	5	-.0000	.0002	.0002	.0037	-.0150	
				6	7	-.0022	.0043	-.0060	.3155		
3D	3/2	3F	7/2	0							
				3	3	.0001	.0001	.0009	.0006	.0079	-.0955
				5	5	-.0003	-.0005	-.0078	-.0163	-.2348	
				1							
				2	1	.0000	-.0000	.0001	-.0022	-.0031	-.0377	.2358
				2	3	-.0000	-.0001	-.0006	-.0003	-.0047	.0573	
				3	3	-.0001	-.0002	-.0016	-.0010	-.0136	.1654	
				4	3	-.0001	-.0001	-.0012	-.0007	-.0101	.1233	
				4	5	.0001	.0002	.0025	.0053	.0760	
				5	5	.0004	.0005	.0086	.0179	.2572	
3D	3/2	3F	5/2	0							
				1	1	.0000	-.0000	.0001	-.0019	-.0026	-.0322	.2014
				3	3	-.0001	-.0001	-.0013	-.0007	-.0105	.1281	
				1							
				1	1	.0000	-.0000	.0000	-.0013	-.0018	-.0228	.1424
				2	1	-.0000	.0000	-.0000	.0007	.0009	.0115	-.0722
				2	3	-.0001	-.0002	-.0018	-.0011	-.0154	.1871	
				3	3	-.0000	-.0000	-.0004	-.0002	-.0030	.0370	
				4	3	.0000	.0000	.0003	.0002	.0023	-.0276	
				4	5	.0005	.0007	.0113	.0237	.3398	
3D	3/2	4P	3/2	0							
				1	1	.0000	.0000	.0001	.0005	-.0007	.0000	-.0909
				3	3	-.0000	-.0002	-.0006	-.0070	-.0175	-.2124	
				1							
				0	1	-.0000	-.0001	-.0003	-.0018	.0029	-.0000	.3520
				1	1	-.0000	-.0001	-.0002	-.0013	.0021	-.0000	.2570
				2	1	-.0000	-.0000	-.0001	-.0005	.0008	-.0000	.0996
				2	3	.0000	.0002	.0004	.0048	.0119	.1451	
				3	3	.0000	.0003	.0007	.0081	.0202	.2453	
3D	3/2	4P	1/2	0							
				1	1	-.0000	-.0001	-.0002	-.0010	.0017	-.0000	.2032
				1							
				1	1	.0000	.0001	.0001	.0007	-.0012	.0000	-.1437
				2	1	.0000	.0000	.0000	.0003	-.0004	.0000	-.0498
				2	3	.0000	.0003	.0008	.0095	.0239	.2902	
4S	1/2	1J	15/2	0							
				7	7	.0007	.0009	-.0355	.0885		
				1							
				7	7	-.0007	-.0008	.0332	-.0828		
				8	7	.0010	.0012	-.0486	.1212		
4S	1/2	1J	13/2	0							
				7	7	.0007	.0008	-.0332	.0828		
				1							
				6	7	-.0010	-.0012	.0486	-.1212		
				7	7	.0007	.0009	-.0355	.0885		
4S	1/2	2H	11/2	0							
				5	5	.0001	-.0015	-.0010	-.0211	.1513	
				1							
				5	5	-.0001	.0014	.0009	.0192	-.1381	
				6	5	.0001	-.0020	-.0014	-.0285	.2049	
4S	1/2	2H	9/2	0							
				5	5	.0001	-.0014	-.0009	-.0192	.1381	
				1							
				4	5	-.0001	.0020	.0014	.0285	-.2049	
				5	5	.0001	-.0015	-.0010	-.0211	.1513	
4S	1/2	3F	7/2	0							
				3	3	-.0001	-.0000	-.0008	.0035	.0033	.2026	
				1							
				3	3	.0001	.0000	.0007	-.0031	-.0029	-.1754	

STRUCTURE AMPLITUDES FOR (p,He^3) REACTIONS

				4	3	-.0001	-.0000	-.0010	.0047	.0044	.2679	
4S	1/2	3F	5/2	0								
				3	3	-.0001	-.0000	-.0007	.0031	.0029	.1754	
				1								
				2	3	.0001	.0000	.0010	-.0047	-.0044	-.2679	
				3	3	-.0001	-.0000	-.0008	.0035	.0033	.2026	
4S	1/2	4P	3/2	0								
				1	1	.0000	.0000	.0004	.0011	.0097	.0239	.2489
				1								
				1	1	-.0000	-.0000	-.0003	-.0008	-.0068	-.0169	-.1760
				2	1	.0000	.0001	.0005	.0013	.0118	.0292	.3048
4S	1/2	4P	1/2	0								
				1	1	.0000	.0000	.0003	.0008	.0068	.0169	.1760
				1								
				0	1	-.0000	-.0001	-.0005	-.0013	-.0118	-.0292	-.3048
				1	1	.0000	.0000	.0004	.0011	.0097	.0239	.2489

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