TABLE 2 (2). HARTREE-FOCK FUNCTIONS FOR POSITIVE IONS.

FLUORINE 1S(2)2S(2)2P(4), 8-3P
T.E.=-0.98831699D+02 P.E.=-0.19766275D+03
K.E.= 0.98831054D+02 V.T.=-0.20000065D+01

S	1S	2S	P	2P
BASIS/ORB E	-27.14132	-2.19484	BASIS/ORB E	-1.44410
1S 8.61501	0.93580	-0.23141	2P 2.33167	0.60326
1S 14.80480	0.03872	-0.00618	2P 4.24798	0.29135
2S 3.74689	0.00360	0.42022	2P 1.64224	0.16094
2S 7.35807	0.03539	-0.11425	2P 9.53227	0.01107
2S 2.36945	-0.00032	0.70036		

NEON 1S(2)2S(2)2P(5), 9-2P
T.E.=-0.12781777D+03 P.E.=-0.25563410D+03
K.E.= 0.12781633D+03 V.T.=-0.20000113D+01

S	1S	2S	P	2P
BASIS/ORB E	-33.61233	-2.61911	BASIS/ORB E	-1.60658
1S 9.86116	0.91448	-0.22341	2P 2.57103	0.58722
1S 16.78310	0.03022	-0.00647	2P 4.72364	0.30522
2S 3.87930	0.00507	0.52587	2P 1.75238	0.16718
2S 8.83998	0.06892	-0.10559	2P 9.81100	0.01385
2S 2.52757	-0.00107	0.57763		

SODIUM 1S(2)2S(2)2P(6), 10-1S
T.E.=-0.16167692D+03 P.E.=-0.32335484D+03
K.E.= 0.16167793D+03 V.T.=-0.19999938D+01

S	1S	2S	P	2P
BASIS/ORB E	-40.75964	-3.07365	BASIS/ORB E	-1.79715
1S 9.60854	1.04471	-0.23717	2P 2.89481	0.54279
1S 16.19560	0.06184	-0.02342	2P 5.26509	0.30481
2S 4.38717	0.00584	0.48735	2P 1.95889	0.21629
2S 10.20650	-0.11882	-0.07038	2P 10.69400	0.01413
2S 2.81650	-0.00106	0.61604		

MAGNESIUM K(2)L(8)3S(1) - 2S
T.E.=-0.19937151D+03 P.E.=-0.39874194D+03
K.E.= 0.19937042D+03 V.T.=-0.20000055D+01

S	1S	2S	3S	P	2P
BASIS/ORB E	-49.35642	-4.08567	-0.54128	BASIS/ORB E	-2.60298
1S 12.16010	0.89679	-0.22539	0.05115	2P 2.83019	0.60377
1S 19.88220	0.02391	-0.00661	0.00160	2P 5.12522	0.42107
2S 4.52530	0.00483	0.83069	-0.20582	2P 9.56577	0.04058
2S 10.93280	0.09625	-0.11655	0.02873		
3S 1.41355	0.00054	-0.00077	0.65000		
3S 1.06321	-0.00035	0.00129	0.40655		
3S 3.55363	-0.00115	0.29691	-0.09583		

ALUMINUM K(2)L(8)3S(2) - 1S
T.E.=-0.24167433D+03 P.E.=-0.48334741D+03
K.E.= 0.24167309D+03 V.T.=-0.20000051D+01

S	1S	2S	3S	P	2P
BASIS/ORB E	-58.81218	-5.21754	-0.65209	BASIS/ORB E	-3.52263
1S 13.41920	0.87459	-0.22161	0.05386	2P 3.28098	0.60412
1S 20.82510	0.02490	-0.00957	0.00304	2P 5.69821	0.41354
2S 4.83620	0.00538	0.88725	-0.24286	2P 10.42940	0.04012
2S 12.17030	0.12018	-0.12545	0.03467		
3S 1.77513	0.00069	-0.00308	0.55460		
3S 1.25381	-0.00038	0.00148	0.52628		
3S 3.88799	-0.00171	0.23144	-0.09809		

SILICON K(2)L(8)3S(2)3P(1) - 2P
T.E.=-0.28857288D+03 P.E.=-0.57713930D+03 K.E.= 0.28856642D+03 V.T.=-0.20000224D+01

S	1S	2S	3S	P	2P	3P
BASIS/ORB E	-69.17485	-6.51253	-0.83853	BASIS/ORB E	-4.60963	-0.58590
1S 14.37600	0.88733	-0.23583	0.06283	2P 5.78133	0.67042	-0.16576
1S 22.84810	0.02220	-0.00611	0.00225	2P 11.00520	0.04869	-0.01132
2S 5.03531	0.00541	0.99217	-0.29911	3P 1.70780	0.00819	0.61271
2S 13.04660	0.10842	-0.12132	0.03699	3P 1.14775	-0.00222	0.44999
3S 2.34292	0.00171	-0.02360	0.47721	3P 4.27372	0.35965	-0.08952
3S 1.51148	-0.00057	0.00590	0.68147			
3S 3.68465	-0.00279	0.13132	-0.14132			

See page 183 for Explanation of Tables and Notes for Tables 32, 42, and 43