g9/2-g7/2 proposed for the group under discussion gives a total spin of only 1, so that a mechanism working against high spins may not be operative here, and a small coupling energy between the neutron and proton groups may produce a change in the preference of orbitals.

The presence of a first forbidden group with $\Delta I = 2$, of course, does not in itself prove rule (2) since a resultant spin 1 in place of 0 would not show up in the ft values. The latter fall within the same limits as given in I for odd A nuclei. Feen berg and Trigg[3] have remarked that for even A ft values for allowed transitions are somewhat lower and for first forbidden transitions with $\Delta I = 2$ somewhat higher than for odd A nuclei, and such a tendency is indeed reflected in the figures given here. The ft values for first forbidden transitions with $\Delta I = 2$ are, however, strictly comparable in the two cases.

The conclusion of I of the smallness of the matrix elements for second forbidden transitions is borne out by the high log ft values for Be^{10}, Na^{22}, and Cl^{36}, which lie all in the neighborhood of 14.

A special discussion is required for the cases where the orbital assignments lead to a change of the Schmidt angular momentum by 2 units, that is, no change in parity, while the spin change is 1. According to the formal selection rules such transitions should be allowed. In case the orbital angular momentum were a good quantum number, these transitions would be second forbidden. Among the cases for odd A nuclei (I, Table 2) O^{19}, Si^{31}, and Ge^{69} show log ft values, respectively, of 5.5, 5.9, 6.0, which are somewhat high for allowed transitions but fall just within the limits of the group. Zn^{65} with log ft = 7.4 falls definitely out of line, while no first forbidden interpretation is compatible with the shell model.

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(3) E. Feenberg and G. Trigg, Rev. Mod. Phys. 22, 399 (1950)