TABLE II (cont.)

e) Δ I = 2. No and Δ I>= 2 (second and higher forbidden)

1	2	3	4	5
49 In 115	- 0.63	49-65	$g_{9/2}-s_{1/2}$	23.2
53 I 129	- 0.12	53-75	$g_{7/2}-s_{1/2}$	13.5
55 Cs 135	- 0.21	55-79	$g_{7/2}-d_{3/2}$	13.1
55 Cs 137	- 1.19	55-81	$g_{7/2}-d_{3/2}$	12.2
75 Re 187	- 0.043	75-111	$d_{5/2}-h_{9/2}$	17.7

The next group with the assignments $\Delta \ell = 1$, Δ I = 2(also first forbidden) was first recognized by Feenberg.[7), 14)] It is of particular interest since its spectra show a uniquely defined shape different from the allowed type.[15)] Since the f factors for such transitions should also be different from that of allowed transitions approximately by a factor $(W^2 - 1)$, we have added in Table II values of $\log(W_o^2 - 1)$ ft, where W_o is the energy of the transition inclusive of the rest of the mass of the electron in units mc^2. The resultant values are remarkably homogeneous except for the very light and energetic nucleus S^{37} and for the positron decay of the Tc^{95} isomeric state. Again the initial and final odd nucleon configurations belong always to different shells except those involving the orbital $h_{11/2}$ of isomeric states. The occurrence of this well defined and easily recognized group constitutes a very valuable check on spins and parity assignments in the shell scheme.

There is a small and perhaps not too well defined group for which the formal assignment of orbitals gives $\Delta \ell = 2$ and $\Delta I = 1$. According to

14) F. B. Shull and E. Feenberg, Phys. Rev. 75, 1768 (1949)

15) Compare the recent review by Chien Shiung Wu, Rev. Mod. Phys. 22, 386 (1950)