

Table 17.8 from (1993TI07): States of ^{17}N from $^{15}\text{N}(t, p)$ ^a

E_x (keV)	L	J^π	E_x (keV)	L	J^π
0 ^b	0	$\frac{1}{2}^-$	4420 ± 7 ^b	2	$(\frac{3}{2}, \frac{5}{2})^-$
1372 ± 6 ^b	2	$(\frac{3}{2}, \frac{5}{2})^-$	5179 ± 4 ^c	5	$(\frac{9}{2}^+)$
1851 ± 4	1	$(\frac{1}{2}, \frac{3}{2})^+$		1	$((\frac{1}{2}, \frac{3}{2})^+)$
1909 ± 3 ^b	2	$(\frac{3}{2}, \frac{5}{2})^-$		(2)	
2524 ± 4	3	$(\frac{5}{2}, \frac{7}{2})^+$	5780 ± 6	(1)	
3127 ± 6 ^b	4	$(\frac{7}{2}, \frac{9}{2})^-$	6233 ± 8 ^d	(2)	
3201 ± 5 ^b	2	$(\frac{3}{2}, \frac{5}{2})^-$	6449 ± 3	(4, 5)	
3625 ± 6 ^b	4	$(\frac{7}{2}, \frac{9}{2})^-$	6627 ± 30	weak	
3664 ± 6 ^b	0	$\frac{1}{2}^-$	6938 ± 15		
3906 ± 5 ^b	2	$(\frac{3}{2}, \frac{5}{2})^-$	6981 ± 20	(3, 4)	
4011 ± 6	(1)		7013 ± 22		
4213 ± 6	3	$\frac{5}{2}^+$ ^e			

^a (1979FO14): $E_t = 15.0$ MeV; DWBA analysis.

^b Predominantly 2p-1h states.

^c Unresolved states.

^d $^{17}\text{N}^*(6.08)$ is not observed.

^e The $\frac{7}{2}^+$ possibility can be eliminated because the $4.21 \rightarrow 1.37$ MeV transition would then have too large an M2 strength (> 500 W.u.). See (1986AJ04).