

The five values of B and the corresponding best-fit values of A used to compute the Mode-5 distributions shown in Figure 9 through Figure 13 are tabulated in Table 20. It is apparent that the value of A is dependent on both  $q\alpha$  and B. In general, if a larger value of B is selected, a larger value of A is required to effect a fit with the random-attitude-turn data. On the other hand, if the breakup  $q\alpha$  is increased, the required value of A must be decreased. Only  $q\alpha$  is critical since, as shown later, any value of B, together with its corresponding value of A, can be used in the launch-area risk computations if significant targets do not lie within  $\pm 80^\circ$  of the flight line.

Table 20. Shaping Constants for Atlas IIAS

Breakup $q\alpha$ (deg-lb/ft <sup>2</sup> )	B	A
none	1,000	1.90
20,000		2.75
14,000 *		3.00 *
10,000		3.20
5,000		3.45
none	50,000	3.15
20,000		4.10
10,000		4.50
5,000		4.75
none	100,000	3.40
20,000		4.30
10,000		4.75
5,000		5.00
none	500,000	4.00
20,000		4.85
10,000		5.30
5,000		5.55
none	5,000,000	4.75
20,000		5.65
10,000		6.10
5,000		6.30

\* interpolated