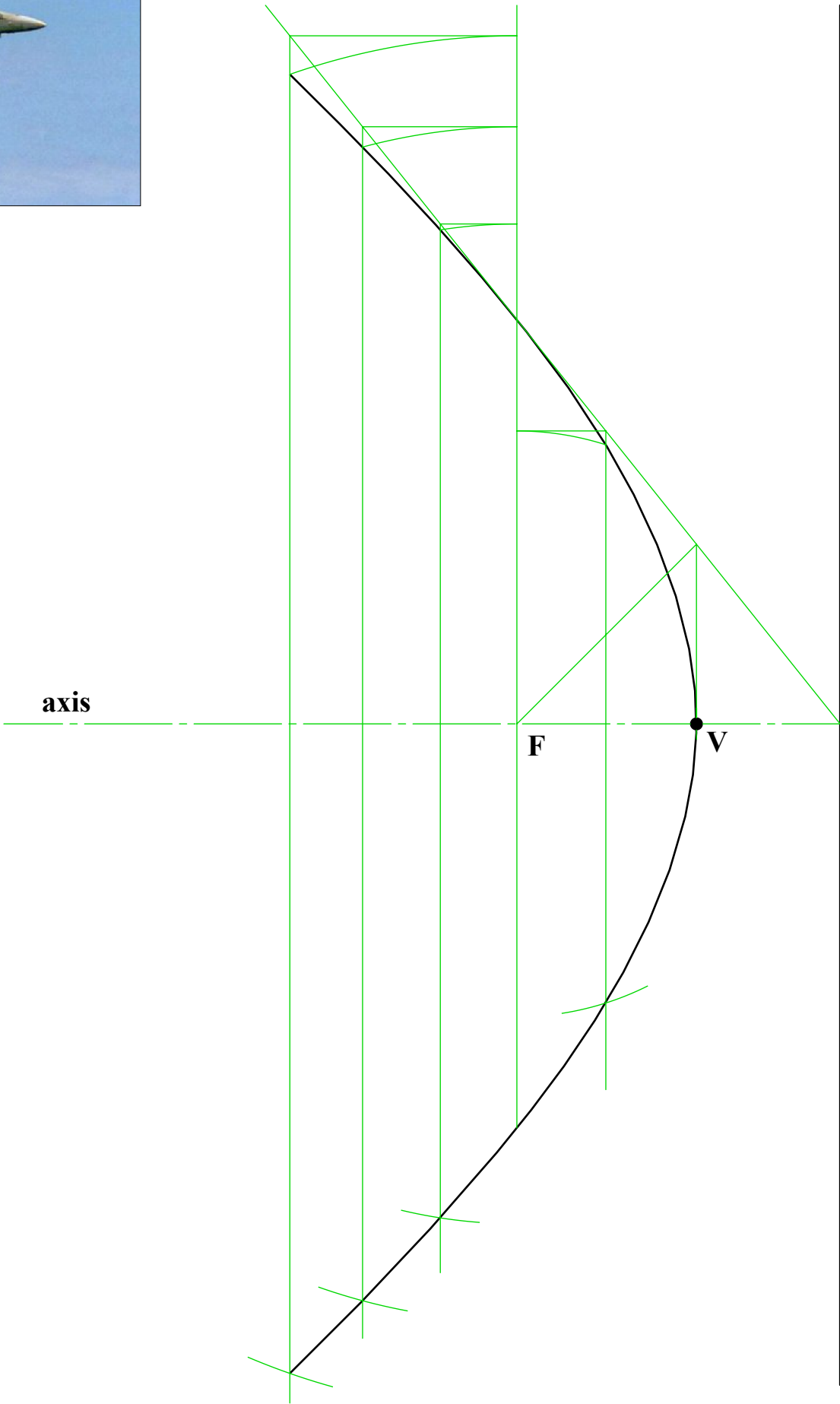


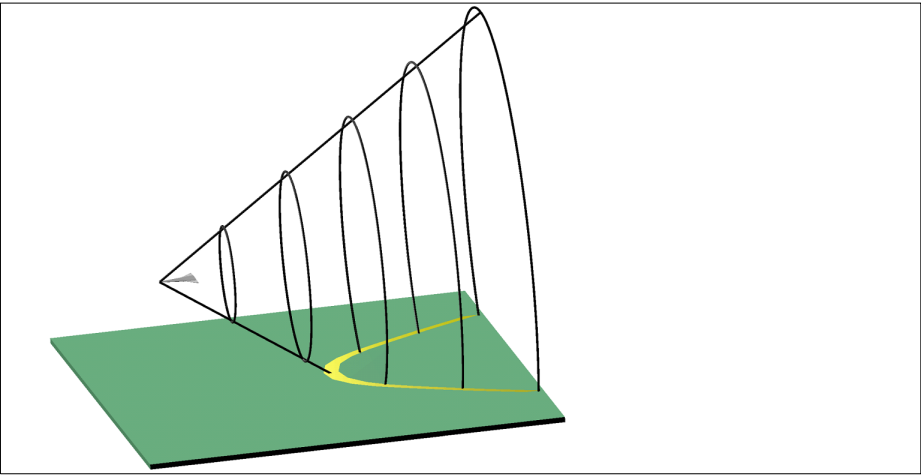


When a plane goes faster than the speed of sound, a **sonic boom** shock wave occurs. A cone shaped wave shoots out of the back of the plane as shown in the photograph over and intersects the ground in part of a **hyperbola**. It hits every point on this curve at the same time, so that people in different places along the curve on the ground hear it at the same time.



D

In the drawing over the line DD represents the **directrix** of a **hyperbola** and V is the **vertex** of the curve. The **eccentricity** is 1.25.
Locate the **focal point** of the hyperbola and draw a portion of the curve.



D

DESIGN & COMMUNICATION GRAPHICS			
TITLE:		CONIC SECTIONS 3	
DRAWN BY:		SIZE A3	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN mm
SCALE:	1:1	DATE:	26/01/2009
		SHEET 1 OF 1	