


Name	Value / Equation	Evaluates to	Comments
 Global Variables			
"Root Chord W"	$= 2 * "S_ref" / ("Span W" * (1 + "Taper Ratio W"))$	22.666893	Scaling variable
"Tip Chord W"	$= "Root Chord W" * "Taper Ratio W"$	7.933413	Scaling variable
"Swept Angle W"	$= 30$	30.000000	Input
"Span W"	$= \text{sqr} ("S_ref" * "AR W")$	122.401224	
"AR W"	$= 8$	8.000000	Input
"S_ref"	$= 1872.75746643$	1872.757466	Input
"Taper Ratio W"	$= 0.35$	0.350000	Input
"MAC W"	$= (2 / 3) * "Root Chord W" * (1 + "Taper Ratio W" - ("Taper Ratio W" / (1 + "Taper Ratio W")))$	16.482469	
"Y W"	$= ("Span W" / 6) * ((1 + 2 * "Taper Ratio W") / (1 + "Taper Ratio W"))$	25.689146	
"V H"	$= 0.34144516$	0.341445	Input
"V V"	$= 0.07109747887$	0.071097	Input
"Swept Angle H"	$= "Swept Angle W" + 5$	35.000000	
"AR H"	$= 4$	4.000000	Figure 6-17
"Taper Ratio H"	$= 0.35$	0.350000	Figure 6-17
"I H"	$= 0.5 * "Span W" * 0.4$	24.480245ft	25 - 40%
"S H"	$= "V H" * 1929.586775 * 17.885852 / "I H"$	481.370143ft	Equation 6-3
"Swept Angle V"	$= "Swept Angle H"$	35.000000ft	
"AR V"	$= 1.6$	1.600000	
"Taper Ratio V"	$= 0.55$	0.550000	
"I V"	$= "I H"$	24.480245ft	
"S V"	$= "V V" * 1929.586775 * 17.885852 / "I V"$	100.233385ft	