Rivet Installation Tools	4-36	Joggling	4-81
Riveting Procedure	4-40	Lightning Holes	4-82
Countersunk Rivets	4-41	Working Stainless Steel	4-83
Evaluating the Rivet	4-44	Working Inconel® Alloys 625 and 718	4-83
Removal of Rivets		Working Magnesium	4-84
Replacing Rivets		Working Titanium	4-85
National Advisory Committee for Aeronautics		Description of Titanium	4-85
(NACA) Method of Double Flush Riveting		Basic Principles of Sheet Metal Repair	4-86
Special Purpose Fasteners		Maintaining Original Strength	4-87
Blind Rivets		Shear Strength and Bearing Strength	4-88
Pin Fastening Systems (High-Shear Fasteners)		Maintaining Original Contour	4-89
		Keeping Weight to a Minimum	4-89
Lockbolt Fastening Systems		Flutter and Vibration Precautions	4-89
Blind Bolts		Inspection of Damage	4-90
Rivet Nut		Types of Damage and Defects	4-90
Blind Fasteners (Nonstructural)		Classification of Damage	4-91
Forming Process		Negligible Damage	4-91
Forming Operations and Terms		Damage Repairable by Patching	4-91
Stretching		Damage Repairable by Insertion	4-92
Shrinking		Damage Necessitating Replacement of Parts	4-92
Bumping		Repairability of Sheet Metal Structure	
Crimping		Structural Support During Repair	
Folding Sheet Metal		Assessment of Damage	4-92
Layout and Forming		Inspection of Riveted Joints	
Terminology		Inspection for Corrosion	
Layout or Flat Pattern Development		Damage Removal	4-93
Making Straight Line Bends		Repair Material Selection	4-93
Bending a U-Channel		Repair Parts Layout	4-93
Using a J-Chart To Calculate Total Developed Width		Rivet Selection	4-94
	4-07	Rivet Spacing and Edge Distance	4-94
How To Find the Total Developed Width	1 60	Corrosion Treatment	
Using a Shoot Motel Broke to Fold Motel		Approval of Repair	
Using a Sheet Metal Brake to Fold Metal Step 1: Adjustment of Bend Radius		Repair of Stressed Skin Structure	
		Patches	
Step 2: Adjusting Clamping Pressure		Typical Repairs for Aircraft Structures	
Step 3: Adjusting the Nose Gap		Floats	
Folding a Box		Corrugated Skin Repair	
Relief Hole Location		Replacement of a Panel	
Layout Method		Outside the Member	
Open and Closed Bends		Inside the Member	
Open End Bend (Less Than 90°)			
Closed End Bend (More Than 90°)		Edges of the Panel	
Hand Forming		Repair of Lightning Holes	
Straight Line Bends	4-74	Repairs to a Pressurized Area	
Formed or Extruded Angles	4-75	Stringer Repair	
Flanged Angles	4-76	Former or Bulkhead Repair	
Shrinking	4-76	Longeron Repair	4-104
Stretching	4-77	Spar Repair	4-104
Curved Flanged Parts	4-77	Rib and Web Repair	4-105
Forming by Bumping	4-79	Leading Edge Repair	4-106