

REFERENCE		WRIGHT AND WRIGHT (1908)		BUDDINGTON & CHAPIN (1929)		CONDON (1961)		THIS PAPER											
AREA		Reconnaissance of southern Alaska south of Frederick Sound at scale of 1:887,000		Most of southeastern Alaska covered by reconnaissance mapping at scale of 1:500,000		Compilation and photogeologic interpretation of Craig 1:250,000 quadrangle		Geologic mapping of Craig B-4, C-3, C-4, C-5, C-6, D-4, D-5, E-6, quadrangles at scale of 1:63,360											
SYSTEM	SERIES	LITHOLOGY	Thickness (feet)	LITHOLOGY	Thickness (feet)	LITHOLOGY	Thickness (feet)	LITHOLOGY		Thickness (feet)									
CRETACEOUS(?)	UPPER	UNCONFORMITY						UNCONFORMITY											
	LOWER							UNCONFORMITY											
JURASSIC	UPPER	Graywacke, slate, and conglomerate carrying granite cobbles; lava conglomerate and sandstone, no fossils. <sup>1</sup>	2000 ±					UNCONFORMITY											
	MIDDLE							UNCONFORMITY											
	LOWER							UNCONFORMITY											
TRIASSIC	UPPER							UNCONFORMITY											
	MIDDLE							UNCONFORMITY											
	LOWER							UNCONFORMITY											
PERMIAN		Beds of Permian through Triassic age not recognized in Craig area.		Limestone with intercalated layers of white chert (300 feet thick, eastern Suez Island).	1000	Closely folded blue and gray limestone (east tip Suez Island).	300	UNCONFORMITY											
				Lower conglomerate, limestone, basaltic to rhyolitic volcanics (missing in Craig area).	3000 ±			UNCONFORMITY											
CARBONIFEROUS	PENNSYLVANIAN	UPPER						UNCONFORMITY											
		MIDDLE	Greenstone lava flows interstratified with volcanic tuff and black slate. <sup>2</sup>	8600 ±	White massive limestone (Pennsylvanian?)	100+	White massive limestone (Pennsylvanian?) (SW Shelikof Island)		Klawak Formation	Ladrones Limestone	700 to 1000+								
		LOWER																	
	MISSISSIPPIAN	UPPER			Interlayered dense gray quartzite and cherty limestone; sparse conglomerate.		Cherty limestone, chert, and quartzite.		Peratrovich Formation	Limestone member	1000 ±								
			Fossiliferous limestone (Soda Springs Bay)	200+	Interbedded coarsely crystalline limestone and black chert.	1000	Coarsely crystalline limestone and thin-layered black chert.	1000		Limestone and chert member									
		LOWER			Thin basal conglomerate and calcareous arkose.		Thin basal conglomerate and calcareous arkose.			Mainly limestone with minor grayish-black chert interbeds									
DEVONIAN	UPPER							LITHOLOGY	Thickness (feet)	SYSTEM	LITHOLOGY								
			Fossiliferous limestone (6 miles south of Klawak; San Juan Bautista Island)	1500 ±	Basalt, andesite (in part pillow lava), tuff, limestone, sandstone, slate, and conglomerate.	1000	Limestone and basalt with minor sandstone, argillite, conglomerate, and tuff.					1000	Port Refugio Formation	Several thousand feet	DEVONIAN (?)	Dark-green massive basaltic submarine flows, breccia, tuff, and conglomerate; flows locally amygdaloidal and exhibit well-developed pillow structure; interbedded tuffaceous siltstone, sandstone, and mudstone; includes zone of thin-bedded banded, pale green to purple weathering, pale red calcareous siltstone, shale and limestone.			
				UNCONFORMITY		Massive limestone	600+					Wadleigh Limestone	1000+						
	MIDDLE		Gray limestone with fossils. (Heceta Island) <sup>3</sup>	1800 ±	Andesitic green to gray tuff (locally cherty) and graywacke, with locally, fine conglomerate layers, intercalated limestone and a minor amount of andesitic lava and breccia. <sup>4</sup>	2400+	Graywacke, slate, conglomerate, and limestone interbedded with volcanics. <sup>4</sup>					2400+	Massive fossil-fragmental thick-to thin-bedded dark-brownish-gray limestone; argillaceous interbeds.	500 ±			Basaltic tuff (in part aquagene), breccia and pillow lava interbedded with limestone.	500 ±	Coronados Volcanics
					Andesitic lava (in part pillow lava), breccia, tuff, conglomerate, and, locally, rhyolitic lava. <sup>5</sup>	2000	Andesitic lava, breccia and conglomerate with cobbles of limestone. <sup>5</sup>					2000							
	LOWER				Interbedded limestone, slate chert, andesitic lava breccia, tuff and, locally, conglomerate. <sup>6</sup>	2000	Slate, limestone, and chert with interbedded andesitic volcanic rocks. <sup>6</sup>					2000							
		Tuff, sandstone, and conglomerate composed of chert, quartzite, limestone pebbles in tuffaceous matrix; no fossils. (1200 feet thick on Heceta Island)	3000 ±	Conglomerate and graywacke like sandstone with local limestone. <sup>7</sup>				Karheen Formation	6000+	Predominantly sandstone, and shale; polymictic pebble, cobble boulder conglomerate, grayish green, reddish-brown weathering festoon crossbedding; carbonate cemented, locally thin-bedded and massive limestone, limestone reef breccia, coarsens southward where it locally rests on beds as old as Early Ordovician.									
SILURIAN	UPPER	(BASE NOT EXPOSED)		Green-gray graywacke with sparse conglomerate beds. Interbedded red, green-gray, and gray graywacke-like sandstone with a small amount of shale. <sup>7</sup>	5000+	Predominantly graywacke; mostly greenish-gray or gray, locally red, interbedded conglomerate, sandstone, or shale. Platy or thin-bedded to massive limestone in upper part, at least locally.	5000+			Heceta Limestone									
	MIDDLE			Predominantly thick-bedded dense limestone; intercalated with thick beds of coarse conglomerate, thin-layered limestone, nodular and shaly argillaceous limestone, and sandstone.	Limestone 3000 ± Cglom 1500 ±	Massive limestone with locally interbedded and intercalated conglomerate, sandstone, or argillite; massive limestone with minor intercalated clastic strata; coarse conglomerate and sandy or argillaceous beds.	17,000+			Massive limestone, mostly thick-bedded and sublithographic with local interbeds of nodular argillaceous limestone and lenses of conglomerate, sandstone, and limestone breccia in a zone near the middle.	10,000 ±								
		LOWER			Andesite, (in part pillow lava) and andesite porphyry lava; conglomerate with some associated graywacke, tuff, breccia, and limestone.	3000 ±													
ORDOVICIAN	UPPER			Indurated graywacke with associated black slate and sparse conglomerate and limy sediments.	?	Andesitic volcanic rocks associated with graywacke, black slate, limestone, and tuff in varying proportions. (Early Silurian and Ordovician)	Max 3000			Descon Formation									
	MIDDLE			Beds of Ordovician and (or) Silurian age not recognized in Craig area.															
	LOWER			Indurated graywacke with associated black slate and sparse conglomerate and limy beds; locally andesitic pillow-lava and volcanic rocks.	?	Graywacke and dark colored to black slate with small proportion of andesitic volcanic rocks, conglomerate, and limy sedimentary rocks. (Lower and Middle Ordovician and Lower Silurian)	Several thousand feet			Predominantly graywacke with interbeds of banded siltstone, mudstone, and fine-grained to very fine grained sandstone; interbedded conglomerate and sedimentary breccia, with clasts of basaltic volcanic rocks, banded siltstone, graywacke, chert, and rare limestone and granitic rocks; thin-bedded black cherty shale and siltstone with graptolitic shale partings and minor thin dark-gray limestone lenses; pistachio-green massive quartz-feldspathic sandstone; basaltic tuff, breccia, and lava with locally developed pillow structure; local massive fine-grained crystalline limestone.	10,000 ±								

<sup>1</sup> Beds so mapped by F.E. Wright and C.W. Wright in Craig area, in places equivalent to Port Refugio, Karheen, and Descon Formations.  
<sup>2</sup> Beds so mapped by F.E. Wright and C.W. Wright in Craig area, in places equivalent to Peratrovich, Port Refugio, Karheen, and Descon Formations.  
<sup>3</sup> Beds so mapped by F.E. Wright and C.W. Wright on Heceta and Tuxekan Islands equivalent to Heceta Limestone of authors; those south of Klawak and east of Craig equivalent to Peratrovich Formation.  
<sup>4</sup> Beds so mapped by A.F. Buddington and Theodore Chapin and compiled by W.H. Condon, in places equivalent to Port Refugio and Descon Formations.  
<sup>5</sup> Beds so mapped by A.F. Buddington and Theodore Chapin and compiled by W.H. Condon, in places equivalent to Port Refugio and Descon Formations.  
<sup>6</sup> Beds so mapped by A.F. Buddington and Theodore Chapin and compiled by W.H. Condon, in places equivalent to Karheen and Descon Formations.  
<sup>7</sup> Units so mapped by A.F. Buddington and Theodore Chapin and compiled by W.H. Condon, are correlative and equivalent to Karheen Formation.

GENERALIZED STRATIGRAPHIC CHART SHOWING COMPARISON OF PALEOZOIC NOMENCLATURE  
INTRODUCED IN THIS REPORT WITH PAST USAGE