



FIGURE 1. MOUNTAINS OF THE ALASKA RANGE. CLIFFS IN FOREGROUND, WHICH DROP 5000 FT. ARE IN GRANITE, AND ARE CAPPED BY OLDER METAMORPHIC ROCKS. VISIBLE ON MOUNTAINTOP AT RIGHT, MOUNT HUNTER, A 14,580 FT. GRANITE MOUNTAIN, IS IN THE DISTANCE. VIEW WEST FROM OVER THE RUTH GLACIER. PHOTOGRAPH BY BRADFORD WASHBURN.

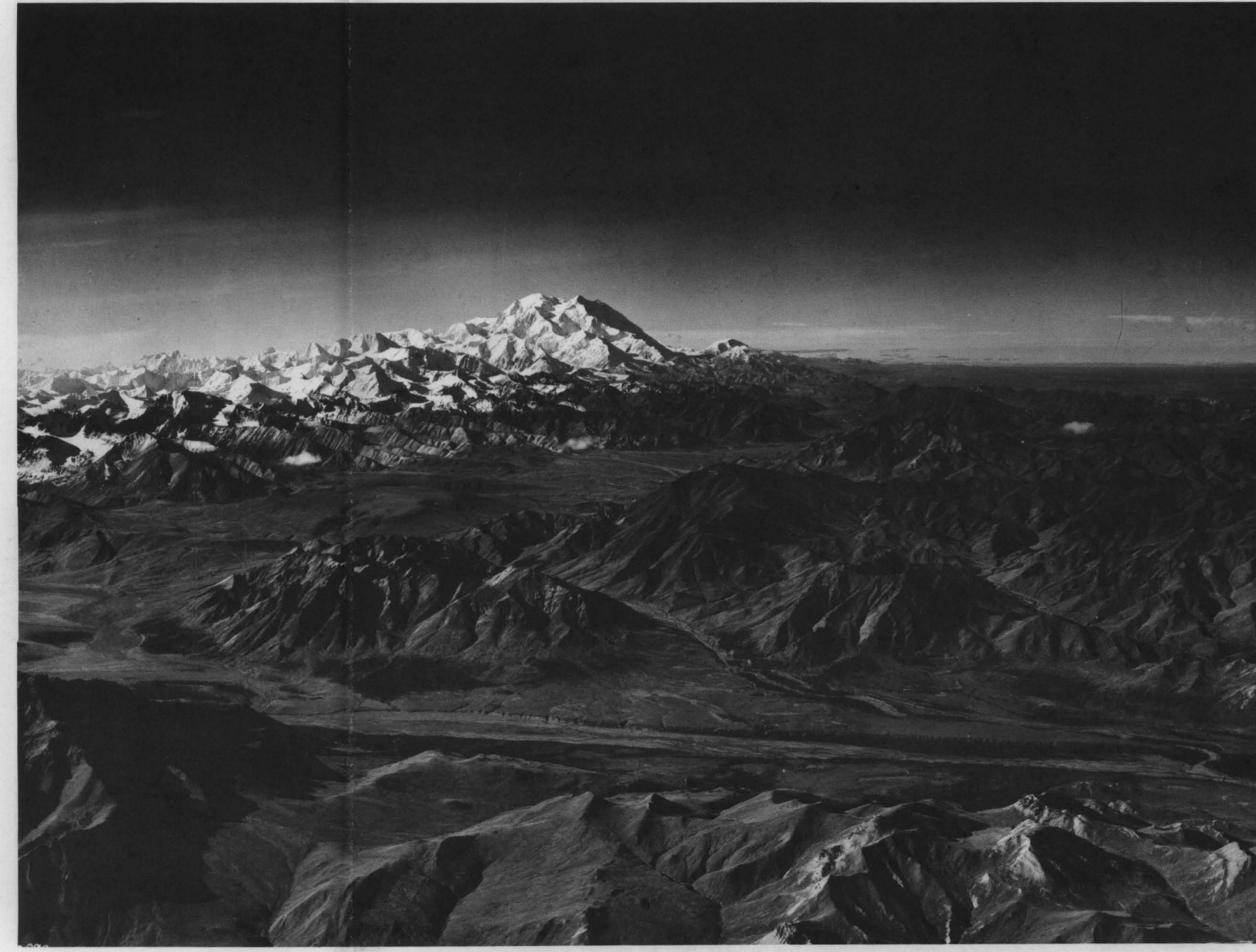


FIGURE 2. THE ALASKA RANGE NORTHEAST OF MOUNT MCKINLEY (20,269 FT.). SEVEN NORTH-FLOWING RIVERS WERE SUPERIMPOSED ON EAST-TRENDING BELTS OF HARD ROCKS (RIGHT) AND SOFT TERTIARY ROCKS THAT UNDERLIE THE LINE OF PLAINS AND PASSES EXTENDING FROM THE LEFT OF THE PICTURE TOWARD THE BASE OF MOUNT MCKINLEY. THE NORTHERN LIMIT OF THE PLEISTOCENE COROLLERAN ICE SHEET IS IN THE PICTURE—GLACIERS FROM MOUNTAINS ON THE LEFT EXTENDED NORTH DOWN THE VALLEYS, BUT THE MOUNTAINS ON THE RIGHT WERE NOT GLACIATED. THE PLAIN IN THE RIGHT DISTANCE IS LESS THAN 2000 FT. ABOVE SEA LEVEL. VIEW SOUTHWEST TOWARD MOUNT MCKINLEY. PHOTOGRAPH BY BRADFORD WASHBURN.



FIGURE 3. PLEISTOCENE VOLCANOES OF THE WESTERN WRANGELL MOUNTAINS. MOUNT DRUM (12,002 FT.) ON LEFT, MOUNT SANFORD (16,208 FT.) IN CENTER, AND MOUNT WRANGELL (14,005 FT.), STILL ACTIVE ON RIGHT. DEFORMED PALEOZOIC AND MESOZOIC SEDIMENTARY AND VOLCANIC ROCKS ARE EXPOSED IN THE LOW MOUNTAINS AT THEIR BASE. THE BLUFFS OF THE COPPER RIVER, IN THE MIDDLE DISTANCE, ARE OF PLEISTOCENE GLACIAL AND LAKE DEPOSITS AND INTERBEDDED VOLCANIC MUDFLOWS OF THE COPPER RIVER LOWLAND. RICHARDSON HIGHWAY AND TONSINA RIVER IN FOREGROUND. PHOTOGRAPH BY BRADFORD WASHBURN.

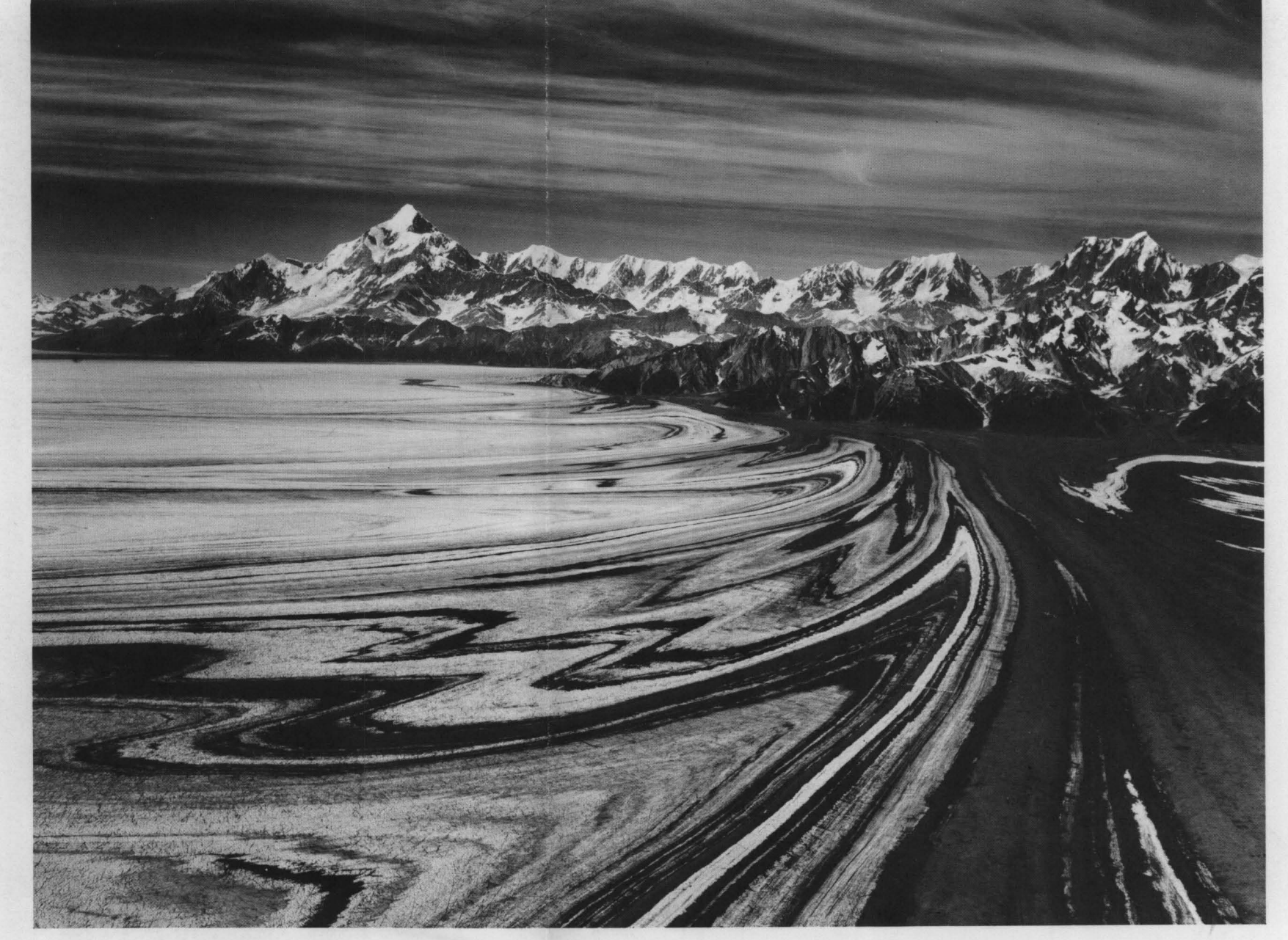


FIGURE 4. THE MALASPINA GLACIER AND THE SOUTH FRONT OF THE ST. ELIAS MOUNTAINS. MOUNT ST. ELIAS (18,008 FT.) AT LEFT RISES 16,000-17,000 FT. ABOVE THE GLACIER SURFACE IN THE FOREGROUND. THE PATTERN OF INTENSELY DEFORMED SUPERGLACIAL MORAINES IS CHARACTERISTIC OF GLACIERS THAT EMERGE ONTO BROAD LOWLANDS. PHOTOGRAPH BY BRADFORD WASHBURN.



FIGURE 5. VIEW NORTH ACROSS THE LOWER MATANUSKA VALLEY. COOK INLET-SUSITNA LOWLAND, THE MATANUSKA RIVER AND THE TOWN OF PALMER ARE ON THE RIGHT. DIRECTLY ABOVE THE RIVER, AT THE BASE OF THE MOUNTAINS, WISHBONE HILL, A SYNCLINAL MOUNTAIN OF CONGLOMERATE, IS THE CENTER OF A MAJOR COAL FIELD. A COMPLEX SYSTEM OF ESKERS AND CREVASSE FILLINGS IN CENTER FOREGROUND PASSES INTO AN OUTWASH PLAIN ON THE LEFT. THE FARMS ARE ON A RICH LOESS SOIL THINNING WESTWARD FROM THE MATANUSKA RIVER. THE FRONT OF THE TALSHEETNA MOUNTAINS IN THE BACKGROUND IS A LARGE FAULT-LINE SCARP. A DISSECTED SURFACE OF FLOW RELIEF CAPS RIDGES ON THE LEFT AND SLOPES WESTWARD BENEATH TERTIARY SEDIMENTS IN THE SUSITNA VALLEY. MOUNT MCKINLEY, 120 MILES AWAY AND 20,269 FT. HIGH, AT LEFT HORIZON. PHOTOGRAPH BY U.S. AIR FORCE.

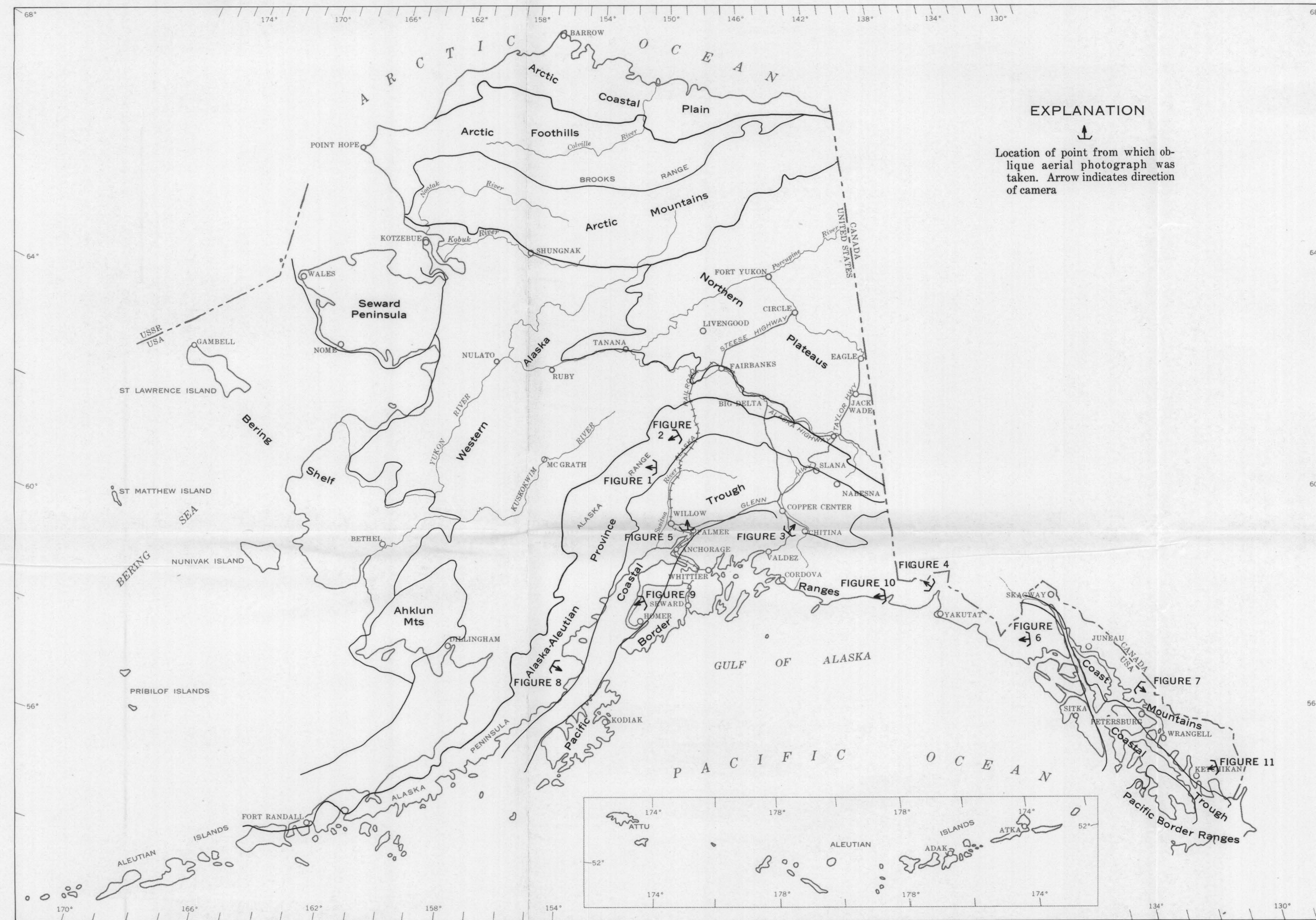


FIGURE 12. MAP OF ALASKA, WITH BOUNDARIES OF PHYSIOGRAPHIC PROVINCES, SHOWING LOCATIONS OF PHOTOGRAPHS



FIGURE 6. FAIRWEATHER RANGE, IN THE BACKGROUND, TOWERS OVER THE ALSEK RANGES IN THE FOREGROUND. MOUNT LA PEROUSE (10,728 FT.) LEFT OF CENTER AND MOUNT CRILLON (12,726 FT.) NEAR RIGHT, ON SKYLINE. GEIKIE GLACIER IN CENTER FOREGROUND, IS SURROUNDED BY MOUNTAINS 4500 FT. HIGH. VIEW WEST FROM OVER GLACIER BAY. PHOTOGRAPH BY R. H. SARGENT, 1929.



FIGURE 7. COAST MOUNTAINS. THE SUMMIT UPLAND OF GRANITIC ROCKS IS ABOUT 8000 FT. HIGH, AND THE SHARP PEAKS ON THE SKYLINE RISE TO ABOUT 8000-8400 FT. VIEW SOUTHEAST FROM THE HEAD OF ENDICOTT ARM UP THE DAWES GLACIER. PHOTOGRAPH BY R. H. SARGENT, 1929.



FIGURE 8. GLACIALLY SCULPTURED TOPOGRAPHY ON GENTLY DIPPING JURASSIC SANDSTONE IN THE EASTERN ALEUTIAN MOUNTAINS. GULLIES FOLLOW FAULTS AND JOINTS. MOUNT DOUGLAS AND FOURPEAKED MOUNTAIN, TWO ACTIVE VOLCANOES, IN THE DISTANCE. KAMISHAK BAY, AN ARM OF COOK INLET, ON THE LEFT. PHOTOGRAPH BY U.S. AIR FORCE.



FIGURE 9. ABANDONED MARGINAL DRAINAGE WAY ON THE NORTH SIDE OF KENAI PENINSULA. COOK INLET-SUSITNA LOWLAND. TINY STREAMS MEANDER THROUGH THESE NARROW, WINDING MARSH-COVERED PLAINS, WHICH WERE PRESUMABLY CARRIED BY MELT-WATER DURING THE Waning OF A LATE PLEISTOCENE ICE SHEET WHEN ICE STILL FILLED COOK INLET. MOUNT REDoubT (10,197 FT.) AND MOUNT LIANNA (10,016 FT.), VOLCANOES OF THE SOUTHERN ALASKA RANGE, RISE ON THE HORIZON BEYOND COOK INLET. PHOTOGRAPH BY U.S. AIR FORCE.

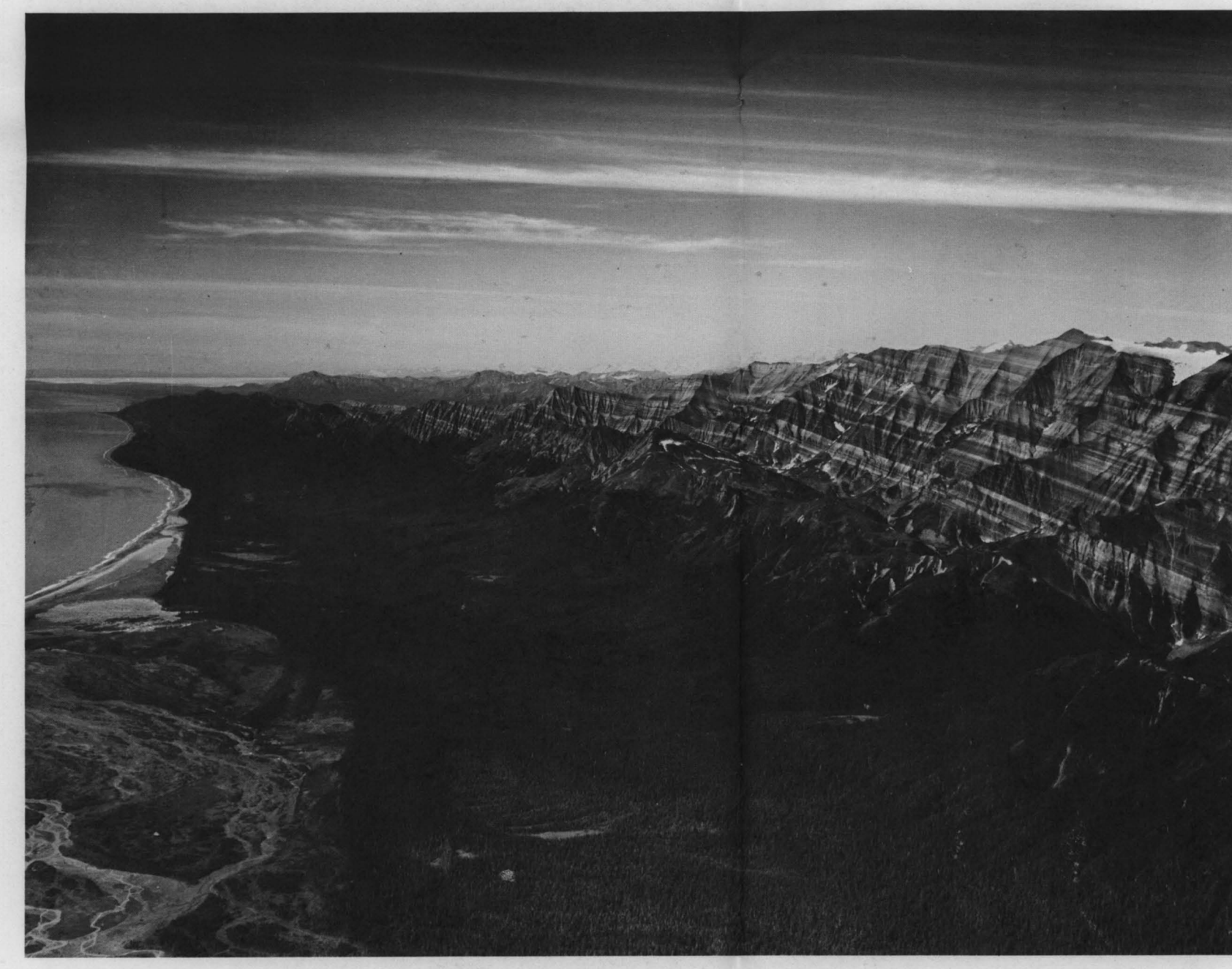


FIGURE 10. SOUTH FACE OF THE ROBINSON MOUNTAINS, 5500-6500 FT. HIGH, WITH COASTAL PLAIN AND MARINE TERRACES IN THE GULF OF ALASKA COASTAL BELT. SOFT TERTIARY ROCKS ON THE SOUTH LIMB OF A BROAD SYNCLINE ARE EXPOSED IN THE MOUNTAIN FRONT. SOME OF THE DARK BANDS ARE MARINE TILLITE. BERING GLACIER IS IN THE LEFT DISTANCE, BEYOND THE END OF THE RANGE, AND THE HIGH MOUNTAINS OF THE CHUGACH RANGE ARE IN CENTER DISTANCE. PHOTOGRAPH BY BRADFORD WASHBURN.



FIGURE 11. ROUNDED MOUNTAINS WITH HUMMOCKY SUMMITS AND ROCK-BASIN LAKES IN THE COASTAL FOOTHILLS, ONCE BURIED BY PLEISTOCENE ICE SHEETS. VIEW WEST OVER EASTERN REVILLAGIGEDO ISLAND, SOUTHEASTERN ALASKA. PHOTOGRAPH BY R. H. SARGENT, 1929.