



FIGURE 1. MOUNTAINS CARVED IN MILDLY METAMORPHOSED SEDIMENTARY ROCKS OF PALEOZOIC AGE, SOUTHERN BROOKS RANGE. LOOKING WEST ACROSS THE SOUTHERN JOHN RIVER. OFFICIAL U.S. NAVY PHOTOGRAPH



FIGURE 2. GLACIATED MOUNTAINS CARVED IN RECUMBENT FOLDS AND OVERTHRUST PLATES OF PALEOZOIC ROCKS, CHIEFLY LIMESTONE OF MISSISSIPPIAN AGE, NORTHERN BROOKS RANGE. LOOKING WEST FROM OVER THE ITKILLIK RIVER. OFFICIAL U.S. NAVY PHOTOGRAPH



FIGURE 3. NORTH FRONT OF THE BROOKS RANGE AND THE PLAINS AND PEDIMENTS OF THE SOUTHERN SECTION OF THE ARCTIC FOOTHILLS. ISOLATED MOUNTAINS OF MISSISSIPPIAN LIMESTONE RISE FROM ROLLING TUNDRA PLAINS CARVED ON HIGHLY DEFORMED YET SOFT LATE PALEOZOIC AND MESOZOIC ROCKS. MORAINES DEPOSITED BY THE ANAKTUVUK GLACIER IN LATE PLEISTOCENE TIME IN RIGHT FOREGROUND. LOOKING WEST FROM OVER THE ANAKTUVUK RIVER NEAR ITS HEAD. OFFICIAL U.S. NAVY PHOTOGRAPH



FIGURE 4. RIDGES OF RESISTANT ROCK RISE ABOVE TUNDRA PLAINS CUT ON SOFT ROCKS IN THE TIGHTLY FOLDED SOUTHERN SECTION OF THE ARCTIC FOOTHILLS. LOOKING WEST FROM OVER THE ETIVLUK RIVER. OFFICIAL U.S. NAVY PHOTOGRAPH



FIGURE 5. GENTLY UNDULATING UPLAND SURFACES AND SHARP-V-SHAPED CANYONS TYPICAL OF THE UPLANDS OF NORTHERN SEWARD PENINSULA. ESCARPMENTS ALONG VALLEY IN FOREGROUND ARE EDGES OF DISSECTED INTRAVALLEY LAVA FLOW. FINELY ETCHED GULLIES ON NEARBY SLOPES ARE CUT ON LOESS WHICH BLANKETS MOST OF THE UPLAND SURFACE. PLACER MINES ALONG RIVER. LOOKING WEST ACROSS VALLEY OF INMACHUK RIVER, ABOUT 20 MILES SOUTH OF DEERING. GODDHOPE BAY IN UPPER RIGHT CORNER. PHOTOGRAPH BY U.S. AIR FORCE

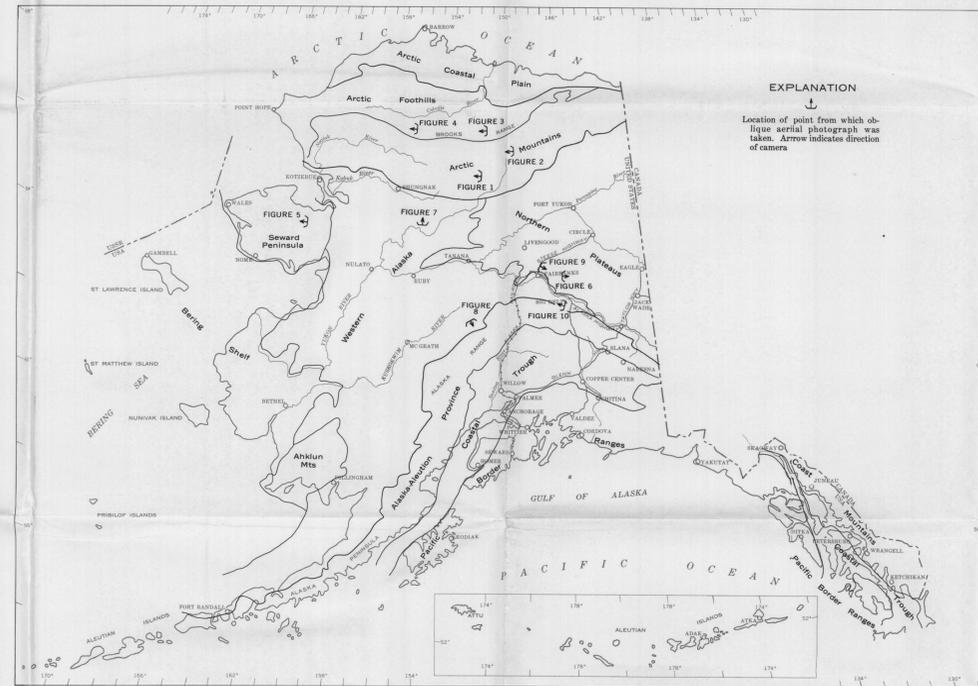


FIGURE 11. MAP OF ALASKA, WITH BOUNDARIES OF PHYSIOGRAPHIC PROVINCES SHOWING LOCATIONS OF PHOTOGRAPHS



FIGURE 6. ROUNDED MOUNTAINS WITH GENTLY SLOPING SIDES, NARROW ALLUVIUM-FLOORED VALLEYS, AND V-SHAPED TRIBUTARY GULCHES. FEATURES OF UPLAND AREAS THROUGHOUT INTERIOR ALASKA. SOUTHERN PART OF THE YUKON-TANANA UPLAND. RELIEF IS ABOUT 1500-2000 FT. BEDROCK IS NORTHEAST-TRENDING PRECAMBRIAN SCHIST. VIEW EAST UP THE CHENA RIVER. PHOTOGRAPH BY U.S. AIR FORCE



FIGURE 7. A COMPACT HIGHLAND ABOUT 4000 FT HIGH IN THE PAH RIVER SECTION. THE SHARP-CRESTED ROUNDED RIDGES, GLACIATED IN PRE-WISCONSIN TIME, HAVE BEEN MODIFIED BY PERIGLACIAL MASS WASTING IN LATER COLD PERIODS. MORAINAL TOPOGRAPHY HAS BEEN DESTROYED. THE SMOOTH ROUNDED RIDGES AND V-SHAPED CANYONS OF THE LOWER HILLS WERE SCULPTURED LARGELY BY MASS WASTING. THE LAKE-DOTTED PAH RIVER FLATS ARE BEYOND THE HILLS. VIEW NORTH ALONG THE ZANE HILLS. PHOTOGRAPH BY U.S. AIR FORCE



FIGURE 8. BRAIDED STREAM ON AN OUTWASH FAN IN THE SOUTHERN PART OF THE TANANA-KUSKOKWIM LOWLAND, NORTHWEST OF MOUNT MCKINLEY. PHOTOGRAPH BY BRADFORD WASHBURN



FIGURE 9. GOLD DREDGING IN A VALLEY IN THE YUKON-TANANA UPLAND NEAR FAIRBANKS. NOTICE THE ROUNDED CRESTS AND SMOOTH GENTLE SLOPES OF THE BEDROCK HILLS. THEIR LOWER SLOPES ARE THICKLY MANTLED WITH LOESS, IN WHICH SHALLOW GULLIES WERE CUT (MARKED BY LINES OF ASPENS). THE BANKS OF THE DREDGE AREA ARE FORMED OF FROZEN SILT AND MUCK, WHICH MUST BE REMOVED BY HYDRAULICING BEFORE THE GOLD-BEARING GRAVELS CAN BE THAWED AND DREDGED. PHOTOGRAPH BY BRADFORD WASHBURN



FIGURE 10. END MORAINES ON THE LITTLE DELTA RIVER, SOUTHEAST PART OF THE TANANA-KUSKOKWIM LOWLAND. SHOWING IRREGULAR TOPOGRAPHY OF MOUNDS AND WATER-FILLED HOLLOWES. VIEW NORTHWEST ACROSS MORAINES. PHOTOGRAPH BY BRADFORD WASHBURN