

Glossary

ACRONYMS AND ABBREVIATIONS

| | |
|----------------|---|
| AK | Arkansas |
| AL | Alabama |
| ALZ | air landing zone |
| APPS | analytical photogrammetric positioning system |
| AR | Army regulation |
| ARTYMET | artillery meteorology |
| ATTN | attention |
| AWS | air weather service |
| AZ | Arizona |
| C | Celsius |
| C A | California |
| CCM | cross-country movement |
| CI | cone index |
| cm | centimeter |
| CO | Colorado |
| Cos | cosine |
| Cot | cotangent |
| Csc | cosecant |
| DA | Department of the Army |
| DBH | diameter at breast height |
| DC | District of Columbia |
| DFAD | digital features analysis data |
| DMA | Defense Mapping Agency |

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|---------------|---|
| DSS | direct support system |
| DTED | digital terrain elevation data |
| DTSS | digital topographic support system |
| DZ | drop zone |
| EAC | echelon above corps |
| EETI | essential elements of terrain information |
| etc. | et cetera |
| F | Fahrenheit |
| FALOP | Forward Area Limited Observation Program |
| FC | field circular |
| FM | field manual |
| FRG | Federal Republic of Germany |
| G2 | Assistant Chief of Staff, G2 (Intelligence) |
| Ggf | ground gained forward |
| Ggs | ground gained sideways |
| H | altitude of the aircraft above mean sea level |
| h | average terrain height above mean sea level |
| HLZ | helicopter landing zone |
| HO | height of obstacle |
| ID | identification |
| IL | Illinois |
| IN | Indiana |
| IPB | intelligence preparation of the battlefield |
| km | kilometer |
| kph | kilometers per hour |
| LOC | lines of communication |
| LOS | line of site |
| m | meters |
| MD | Maryland |
| METT-T | mission, enemy, terrain, troops, and time available |
| MGI | military geographic information |
| MI | military intelligence |
| MI | Michigan |
| MLC | military load classification |
| mm | millimeters |

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|--------------|--|
| MN | Minnesota |
| MO | Missouri |
| MOUT | military operations on urbanized terrain |
| mph | miles per hour |
| MRF | map representative fraction |
| MSR | main supply route |
| MT | Montana |
| MTR | minimum turning radius |
| MY | New York |
| NATO | North Atlantic Treaty Organization |
| NCO | noncommissioned officer |
| NE | Nebraska |
| NH | New Hampshire |
| NM | New Mexico |
| NO | number |
| NOE | nap of the earth |
| OCOKA | observation and fields of fire, cover and concealment, obstacles, key terrain, and avenues of approach |
| OD | override diameter |
| OH | Ohio |
| OK | Oklahoma |
| OR | Oregon |
| P | paved |
| PA | Pennsylvania |
| PDG | point designation grid |
| PI | photo interpretation |
| PRF | photo representative fraction |
| PSR | photo scale reciprocal |
| PTADB | planning terrain analysis data base |
| QPS | quantity processing system |
| RCI | rating cone index |
| RDZ | paratroop/resupply drop zone |
| RF | representative fraction |
| RI | remolding index |
| RSI | remote-sensed imagery |

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|-----------------|--|
| RTZ | radius of touch zone |
| S2 | intelligence officer (US Army) |
| SD | stem diameter |
| SD | South Dakota |
| Sec | secant |
| SF | safety factor |
| SIF | slope-intercept frequency |
| Sin | sine |
| SLAR | side-looking airborne radar |
| S s | stem spacing |
| Swo | staff weather officer |
| Tan | tangent |
| TC | tree count |
| TGR | takeoff ground run |
| TM | technical manual |
| TN | Tennessee |
| TOE | table(s) of organization and equipment |
| TTADB | tactical terrain analysis data base |
| TX | Texas |
| u | unpaved |
| Uc | under construction |
| us | United States (of America) |
| USAF | United States Air Force |
| USAFETAC | United States Air Force Environmental Technical Applications Center |
| USCS | Unified Soil Classification System |
| USGS | United States Geological Survey |
| USSR | Union of Soviet Socialist Republics |
| UT | Utah |
| UTM | universal transverse mercator |
| VA | Virginia |
| VCI | vehicle cone index |
| VF | vehicle factor |
| VR | vegetation roughness |
| VRF | vegetation roughness factor |

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|------|----------------------------------|
| WA | Washington |
| WCET | windchill equivalent temperature |
| WETM | weather teams |
| WI | Wisconsin |
| ZOE | zone of entry |

TERMS

abutment - the support at either end of a bridge.

air base - an airfield having, in addition to operational facilities, shelter for personnel and facilities for supply and repair of aircraft.

airfield - a group of facilities designed for takeoff, landing, servicing, fueling, and parking of fixed-wing and rotary-wing aircraft.

alluvium - general term for material deposited by streams, including silt, sand, gravel, clay, or boulders derived from decomposed bedrock but deposited elsewhere.

altitude - the height above an established reference base. Altitude is usually measured as height above mean sea level.

apron, cargo - a prepared area for loading and unloading personnel and cargo.

apron, maintenance - a prepared area for parking aircraft being serviced or repaired.

apron, parking - a prepared area used in place of hardstands for the parking of aircraft. It is also referred to as a conventional apron.

apron, warmup - a stabilized or surfaced area used for the assembly or warming up of aircraft, usually located at both ends of the runway adjacent to and with the long axis parallel to the connecting taxiway.

aqueduct - a large pipe or conduit made for transporting water from a distant source.

avenue of approach - route by which a force may reach an objective.

badlands - a geographical area nearly void of vegetation. An almost impassable region due to narrow avenues, sharp crests, and pinnacles.

bank - the continuous sloping margin of a stream or other water body; on a stream, designated left or right bank as it would appear to an observer facing downstream.

bar - an accumulation of alluvial material in a stream channel, commonly emergent at low water.

basalt - common name for a group of dark, fine-grained, heavy, very hard volcanic rock.

bed - the bottom on which a body of water rests.

bog - a swamp or tract of wet land commonly covered with peat.

brush - shrubs and stands of short, scrubby tree species that do not reach sufficient size for use as timber.

canal - a channel or waterway artificially constructed or maintained for conveying water or for connecting two or more bodies of water.

canopy - uppermost closed surface or roof of the forest.

channel - the trench in which a stream normally flows; that part of a body of water deep enough to be navigable.

channel cross section - a representation of a channel as it would appear if cut through crosswise and vertically at right angles to its long axis and depicting, specifically, the area of the channel through which flow has passed or is supposed to pass.

channel roughness - roughness of the channel, including extra roughness due to local expansion or contraction and obstacles, as well as roughness of the stream bed proper, such as friction offered to the flow by the surface of the bed of the channel in contact with the water; expressed by the roughness coefficient of the velocity formulas.

classification yard - a yard in which the traffic is classified in accordance with requirements and made up into trains.

clay - soil particles having diameters less than 0.0002 millimeters.

concealment - protection from observation only,

conduit - an artificial or natural channel which carries water for supply or industrial purposes.

conifer - cone bearing - trees of the "soft-wood" group such as spruce and pine. Most but not all conifers are evergreen and needle-leaved.

coniferous forest - a forest of evergreen coniferous or cone-bearing trees carrying needle-shaped leaves. Such forests have valuable softwood timber.

contamination - impairment of the quality of water to a degree which creates an actual hazard to public health by toxic chemicals, radioactive isotopes, or pathogenic organisms.

contour density - the spacing of contour lines on a map.

cover - protection from weapons fire.

cross-country movement - movement across terrain that is not specifically improved for vehicular traffic.

crown - the entire leafy part of a tree or shrub, especially as seen from above.

current velocity - the speed, expressed in units of time and distance, at which water flows in a stream, channel, or conduit.

data base - a collection of information in any form, assembled for a particular future use.

deciduous - vegetation losing all their leaves seasonally, either in the cold or dry season.

deciduous forest - a forest consisting of trees that lose their leaves at some season of the year. Such forests have valuable hardwood timber.

dendritic - a branching tree-like pattern of tributaries of a main stream.

departure yard - a yard in which trains are placed waiting departure.

diameter breast height - the diameter of a tree at 1.4m (approximately 4.5 feet) above ground level. It is abbreviated DBH.

drainage - the process of removing surface water or ground water by artificial or natural means.

engine yards or terminals - an area containing all the tracks, buildings, structures, and facilities necessary for the maintenance, care, and storage of locomotives and for providing them with all needed supplies such as fuel, water, sand and oil.

estuary - the portion of a stream valley influenced by the tide of the body of water into which it flows.

evergreen - vegetation that retains its green foliage throughout the year.

flight line - a line drawn on a map or chart to represent the flight path which an aircraft has flown when taking a series of consecutive aerial photos.

flow - a quantity of water carried by a stream or conduit, expressed in volume per unit of time.

freight terminal - the installation and facilities for handling freight business.

fiducial marks - index marks rigidly connected with the camera lens through the camera body, which form images on the negative. These marks, when intersected by a straight line drawn between opposite fiducial marks, define the principal point of the photographic print.

fuel storage area - an accessible area, having good cover, located a safe distance from troops, aircraft, and other facilities, and used for the storage and dispensing of aviation fuels.

gradient - the longitudinal slope, obtained by dividing the difference in bed or water-surface elevations.

grasslands - regions or areas where the dominant natural vegetation consists of grass.

gravel - loose, coarse, granular material larger than sand grains, resulting from breaking down of rock.

gravity yard - a yard in which the movement of cars to different sidings for sorting is accomplished by gravity alone.

hardstand - a stabilized or surfaced area provided to support standing aircraft. Hardstands are normally dispersed at intervals along each side of a taxiway.

hectare - 10,000 square meters, or 2.47 acres.

helicopter landing pad (helipad) - a prepared area on the ground designated and used only to accommodate takeoff and landing of helicopters.

heliport - a group of facilities designed for takeoff, landing, servicing, fueling, and parking of rotary-wing aircraft.

heliport landing area - a specifically prepared surface designed for rotary-wing aircraft takeoff and landing operations. It includes the paved surface (runway or landing pad) and the areas immediately adjacent thereto that have been cleared of all above-ground obstructions.

hydrology - a science dealing with the occurrence of water on the earth; its physical and chemical properties, transformations, combinations, and movements; especially with the course of water from the time of its precipitation on land until its discharge into the sea or return to the atmosphere.

index contour - contour line shown more prominently than the adjacent ones, usually every fifth one.

inland waterways - rivers, canals, lakes, and inland seas that are used as avenues of transport.

intermittent stream - a stream that flows only seasonally; one that has not cut its valley below the water table.

key terrain - any area whose seizure or control affords a marked advantage to either opposing force.

landform - the physical expression of the land surface.

lateral safety zone - an area (transitional surface) located between the runway clear area of runway edge when no clear area is provided and the clearance lines limiting the placement of building construction and other obstacles with respect to the runway centerline. The slope of the transitional surface is 7:1 outward and upward at right angles to the runway centerline.

levee - an embankment along a stream or other water body, built for the purpose of limiting floods.

line of sight - intervisibility between two points located on the earth's surface.

lines of communication - all routes--land, water, and air--that can be used by military forces in an area of operations.

local relief - the difference in elevation of the land surface.

lock - an enclosure in a canal or river with gates at each end, used in raising or lowering boats as they pass from level to level.

marsh - a tract of spongy, wet, or water-covered treeless ground usually covered by grasses, cattails, or similar vegetation.

observation - ability of force to exercise surveillance over a given area through the use of personnel or sensors.

obstacle - any object that stops, delays, or diverts movement.

outcrop - any exposure of bedrock.

overrun - a graded and compacted portion of the clear zone, located at the extension of each end of the runway to minimize risk of accident to aircraft due to overrun on takeoff or undershooting on landing. Its length is normally equal to that of the clear zone and its width is equal to that of the runway and shoulders.

parallax - the apparent displacement of the position of a feature with respect to a reference point or system caused by a shift in the point of observation.

passenger terminal - the installation and facilities for handling waiting passengers.

permeability - a rock's capacity for transmitting fluids.

photo base - the straight-line distance between the two principal points of two consecutive serial photographs.

planimeter - an instrument for measuring the area of any plane figure by passing a tracer around the boundary line.

pollution - impairment of the quality of water by biological, chemical, physical, and radioactive substances to a degree which may not create an actual hazard to public health but which does adversely and unreasonably affect such water for some beneficial uses; almost any substance becomes a pollutant if concentrated sufficiently.

pond - a small area of still water, usually artificial.

porosity - a measure of the proportion of a material consisting of pore space or voids.

profile - the bottom or water surface elevation of a stream plotted against distance.

relief - the irregularities of a land surface.

representative fraction - the ration between map or photo distance and ground distance expressed as a fraction in the same units.

reservoir - an area of water storage often artificially created by building a dam at a suitable retaining point across a watercourse.

revetment - usually a mound or wall of earth, masonry, timber, sandbags, or other suitable material erected as a protection for aircraft against small arms or artillery fire, bomb splinters, or blast.

road, access - a two-way road, normally improved, connecting the air base or airfield with the existing road system of the vicinity.

road, service - a road connecting the access road and the bomb and fuel storage areas with all hardstands and aprons for the purposes of refueling, rearming, and servicing aircraft.

running track - a track reserved for movement through a yard. Running tracks are provided for movement in either direction to enable yard engines to pass freely from one part of the yard to another.

runoff - that portion of the precipitation that is transmitted through natural surface channels; the residual of rainfall after the deduction of losses.

runway - a stabilized or surfaced rectangular area located along the centerline of the flightstrip on which aircraft normally land and take off.

sand - individual rock or mineral particles having diameters ranging from 0.5 to 2.0 millimeters.

sandstone - a sedimentary rock composed of sand-sized grains of minerals and rock fragments cemented together.

scale - the ratio between the distance on a map or photo and the corresponding distance on the ground.

sedimentation - the process by which mineral and organic matter are deposited to make sediments.

shoulder - a graded and compacted area on either side of the runway to minimize the risk of accident to aircraft running off or landing off the runway.

shrub - a low plant (not more than 5 meters high) with woody stems branching near the base.

siding - a short track connected to the main track by a switch and used for unloading, bypassing, and so forth.

silt - individual mineral particles of soil that range in size between clay and sand (0.002 m to 0.5 millimeters in diameter).

single track - a main track upon which trains are operated in both directions.

species - a kind of plant that can be distinguished from all others on the basis of inherited characteristics.

spring - a natural flow of water from the earth's surface occurring where the water table intersects the course.

sour track - a track of indefinite length diverging from a main line or track.

stand - an aggregation of trees, standing in a definite limited area.

stand density - density of stocking expressed in number of trees per hectare.

station - a place designated by name on the timetable at which a train may stop for traffic, enter or leave the main tracks, or from which fixed signals are operated.

stereoscope - a binocular instrument used for viewing in three-dimensional expressions.

storage yard - a yard in which cars are held awaiting disposition.

stream - a general term for a body of flowing water. The term is usually applied to water flowing in a natural surface channel; but it may also be applied to water flowing in an open or closed conduit and to a jet of water issuing from an opening.

swamp - a tract of wet or water-covered ground overgrown with trees and shrubs.

switch engine - an engine assigned to yard service and working within yard limits.

synthesis - the combining of elements of diverse material into a single or unified product.

takeoff ground run - the distance traveled by an aircraft along the runway before becoming airborne.

taxiway - a prepared strip for the passage of aircraft on the ground to and from the runway and parking areas. The width of the taxiway includes a stabilized, surfaced, or paved central strip.

texture - the frequency of change and arrangement of photographic tones.

touchdown area - that portion of the beginning of the runway normally used by aircraft for primary contact of wheels on landing.

tree - a woody, perennial plant with a single main stem more than 5 meters tall,

tributary - a surface or underground stream which contributes its water, either continuously or intermittently, to another and larger stream.

turbidity - the approximate amount of suspended matter in water, expressed in parts per million.

water body - an inland body of water which may or may not have a current or single direction of flow, such as a lake, reservoir, or pond.

water table - the upper surface of the zone of saturation.

watershed - the entire region that contributes water to a river or lake. Also called a drainage basin, river basin, or catchment area.

well - a deep hole or shaft sunk into the earth to tap an underground supply of water.

yard - a system of tracks provided for making up trains, storing cars, or for maintaining or repairing cars.

zone of entry - any area in which personnel, supplies, or equipment can be placed within reach of a military objective.