

NERTIC ZONE - 1) That part of the sea floor extending from the low tide line to a depth of 200 meters. 2) A part of the pelagic division of the oceans with water depths less than 200 meters.

NET - A series of triangulation figures covering an area in such a way that the lengths and relative directions of all lines forming the triangles can be computed successively from a single base.

NETWORK (USGS) - A group or series of survey lines interconnected to form a number of closed loops or circuits.

NEW YORK ROD - A two piece leveling rod with a movable target. The rodman reads a vernier for target elevations.

NO CHECK POSITION - A horizontal control survey station observed from only two stations; an intersection station. An elevation determined from vertical angles sometimes is used to guard against gross blunders.

NODAL POINTS - Two points associated with a lens system, such that any ray in the object space directed toward the first or front point will emerge in the image space from the second or rear point and parallel to its former position.

NOISE - Any undesired sound; by extension, a noise is any unwanted disturbance within a useful frequency band, such as undesired electric waves in a transmission channel or device.

NOMINAL FOCAL LENGTH - An approximate value of the focal length, rounded to some standard figure, used for the classification of lenses, mirrors, or cameras.

NORMAL - In general, a straight line perpendicular to a surface or to another line; also, the condition of being perpendicular to a surface or line.

NORMAL ANGLE LENS - A lens having an angle of coverage between 60° and 75°.

NORMAL POOL ELEVATION - The level at which a controlled body of water is generally maintained.

NORMAL SECTION - A straight line cut by a plane perpendicular to the surface of the earth ellipsoid at the observer's station.

NORMAL TENSION - The pull applied to a tape which stretches the metal in an amount equal to the shortening caused by sag.

NORMAL WATER LEVEL (USGS) - The most prevalent water level in a watercourse, reservoir, lake or pond, generally defined by a shoreline of permanent land-type vegetation. Along large bodies of water, wave action may retard vegetation beyond the normal shoreline. See HIGH WATER MARK*.

NORTH - The primary reference direction relative to the earth. See ASTRONOMIC NORTH, GEODETIC NORTH, GRID NORTH, MAGNETIC NORTH, and TRUE NORTH.

NORTH AMERICAN DATUM OF 1927 (1927 NAD) - This datum is identical with the North American Datum except that the azimuth was changed. It was adopted in 1927 after a readjustment of the triangulation of the entire country, in which Laplace azimuths were introduced. It is now standard geodetic datum on the North American continent.

NORTH AMERICAN DATUM (NAD) - A Geodetic Datum for horizontal surveys superseded by the North American Datum of 1927.

NORTH ARROW - A symbol indicating the direction and the type of meridian to which the control framework of a map or drawing is referenced. Auxiliary arrows may be shown indicating the direction of other meridians which may be of interest to the user of the map.

O

OCS - Outer Continental Shelf.

OCS/MINERAL MANAGEMENT MAP - A series of maps for use in leasing outer continental shelf lands.

OBJECTIVE LENS - The lens, in a telescope or microscope, which is nearest the object.

OBLATE SPHEROID - The mathematical shape assumed by a homogenous rotating mass, used as an approximation of the earth's shape.

OBLIQUE MERCATOR PROJECTION - A map plotting system in which points on an ellipsoid are mathematically projected onto a cylinder oriented tangent to an oblique line at the map center; used in one of the Alaska State Plane Coordinate systems.

OBLIQUE PHOTOGRAPH - An aerial photograph taken with the camera axis intentionally tilted from the vertical.

OBSERVATION SCENE - Collection of the image data of one nominal framing area of the earth's surface; this includes all data from each spectral band of each sensor.

OCCUPY - To set up a survey instrument over a point.

OCEAN - The sheet of salt water which surrounds the great land masses of the earth; it is divided by them into several extensive portions, each known as an ocean, and altogether covers 71 percent of the earth's surface. The oceans may be divided into three district regions, the Littoral, the Pelagic, and the Abyssal. Alternatively, they may be divided according to depth into four regions: 1) the Continental Shelf, which adjoins the land, 2) the Continental Slope, immediately outside the continental shelf, 3) the deep-sea plain, a wide and almost level area forming most of the ocean floor, and varying in depth from about 2,000 to 3,000 fathoms, and 4) the Deeps.

OFFICIAL OCS PROTRACTION DIAGRAM - A series of maps which define lease blocks on the outer continental shelf.

OFFSET PRINTING - A process of lithographic printing from a flat or cylindrical pressplate in which the inked image on the pressplate is first transferred to a rubber-surfaced cylinder and then printed, or offset, onto a sheet of paper or other material.

OFFSHORE (USGS) - The zone extended seaward for an indefinite distance from the limit of mean low water (Atlantic and Gulf coasts) and from mean lower low water (Pacific coast).

OPEN TRAVERSE - A traverse which does not close upon itself or another known point.

OPEN WINDOW NEGATIVE - A negative having open areas, used as a mask where screens, rulings and tints are to be printed in the open areas.

OPTICAL AXIS - The straight line which passes through the center of curvature of a lens element. In a compound lens, if the centers of the curvature of all the components lie in one straight line, this line is the optical axis of the lens.

OPTICAL COLOR COMBINER - Instrument which produces false or "true" color images by linearly combining a few black-and-white films of the same scene. The films are usually obtained from multi-band or time-sequential photography. The films are put in projectors which are all focused on the same screen and which have various color filters placed in front of their lens. The brightness of the projector's lamp in each projector can be changed independently thereby changing chromaticity balance.

OPTICAL DENSITY - Photographic transmission density.

OPTICAL FLAT - A surface, usually of glass, specially ground and polished plane within a fractional part of a wavelength of light, used to test the flatness of other surfaces. See PLANE PARALLEL PLATE.

OPTICAL PLUMB (ALSO OPTICAL PLUMMET) - A device for optically determining a vertical line of sight, serving the same function as a plumb bob.

OPTICAL SQUARE - See PENTA PRISM.

ORIENTATION - 1) The act of establishing the correct relationship in direction with reference to the points of the compass. 2) The state of being in correct relationship in direction with reference to the points of the compass. 3) A map is in orientation when the map symbols are parallel with their corresponding ground features. 4) A planetable is in orientation when lines connecting positions on the planetable sheet are parallel with the lines connecting the corresponding ground objects. 5) A surveyor's instrument is in orientation if the horizontal circle reads 0° when the line of collimation is parallel to the direction it had at an earlier (initial) position of the instrument, or to a standard line of reference. If the line of reference is a meridian, the circle will show azimuths referred to that meridian. 6) A photograph is in orientation when it correctly presents the perspective view of the ground directly in front of the observer; or when the images on the photograph appear in the same direction from the point of observation as do the corresponding map symbols. See ABSOLUTE ORIENTATION, RELATIVE ORIENTATION and INTERIOR ORIENTATION.

ORIGIN - The point in a system of coordinates which serves as an initial point in computing and where $X = 0$ and $Y = 0$.

ORTHOGRAPHIC PROJECTION - A map plotting system whereby parallel lines project from points on the sphere to a plane tangent to the sphere at the map center; not practicable for plotting survey data.

ORTHOMETRIC CORRECTION - A systematic correction which must be applied to a measured difference of elevation because level surfaces at different elevations are not exactly parallel.

ORTHOMETRIC ELEVATION - An elevation value to which the orthometric correction has been applied.

ORTHOPHOTOGRAPH - A photograph derived from perspective photographs and equivalent to a photograph made by orthographic projection. In a perfect orthophotograph, there are no displacements of images because of tilt or relief.

ORTHOPHOTOMAP - A photomap prepared from a orthophotograph or a precisely controlled assembly of orthophotographs. It is generally published in standard map format. See PHOTOMAP.

ORTHOPHOTOMOSAIC - As assembly of orthophotographs, usually precisely controlled, to form a uniform-scale photographic representation of a portion of the earth's surface.

ORTHOPHOTOSCOPE - An instrument for converting conventional perspective photographs into orthophotographs by differential rectification. It features a double-projection anaglyphic instrument and a movable exposing slit that is used to scan the ground surface of the projected stereomodel in a systematic pattern. It records the orthographically corrected imagery of the blue-filtered diapositive on film insensitive to red light.

OUTER CONTINENTAL SHELF - Under Public Law 212 (the Outer Continental Shelf Lands Act) it is that portion of the continental shelf which lies seaward of state boundaries as defined in Public Law 31 (the Submerged Lands Act).

OVERLAP - The amount by which one photograph duplicates the area covered by another photograph, usually expressed as a percentage.

OVERLAY - 1) A drawing on a transparent medium to be superimposed on another drawing. 2) A transparent medium on which flight lines and/or area to be photographed are plotted to be superimposed on a map, thus avoiding defacing the map.

OVERSHEET - A transparency or a print of a map compilation used for recording supplemental information.

OXBOW - A crescent-shaped lake formed in an abandoned river bend which has become separated from the main stream by a change in the course of the river.

P

PADS - Position azimuth determination system.

PI - Photo Interpretation.

PUG - Punkt Übertragungs Geräte. See POINT MARKING AND TRANSFERRING DEVICE.

PZS - Pole-Zenith-Star or Pole-Zenith-Sun.

PANCHROMATIC - Photographic emulsion sensitive to all colors of light.

PANEL - An element of a target used for ground control or point identification during aerial photography.

PANELING - Marking points on the ground with material of suitable contrast, size, and shape to provide images which can be positively identified on aerial photographs.

PANEL POINT - A photo image of a paneled point.

PANTOGRAPH - A precision mechanical instrument for reproducing at some desired scale, generally at a reduction, details from stereomodels, photographs, maps, drawings, etc.

PARALLACTIC ANGLE - See ANGULAR PARALLAX.

PARALLAX - The apparent displacement of the position of an object with respect to a reference point or system caused by a shift in the point of observation. See ABSOLUTE STEREOSCOPIC PARALLAX, X PARALLAX AND Y PARALLAX.

PARALLAX BAR - See STEREOMETER.

PARALLAX DIFFERENCE - The difference in the absolute parallaxes of two points imaged on a pair of photographs. Customarily used in the determination of the difference in elevations of the objects.

PARALLEL - 1) The relationship between two lines in the same plane which will not meet if extended. 2) A line on the earth (or a map) having the same latitude at every point.

PARALLELOGRAM OF ZEISS - See ZEISS PARALLELOGRAM.

PARALLEL PLATE - See PLANE PARALLEL PLATE.

PASS - A low and passable gap through a mountain barrier.

PASSIVE SYSTEM - A sensing system that detects or measures radiation emitted by the target.

PASS POINT - A point selected on imagery of the same object or point on the ground appearing on three or more photographs, used to relate adjacent stereomodels, or strips horizontally (and usually also vertically) in aerotriangulation; also, the corresponding point on the base sheet used to provide a basis for stereomodel positioning and orientation in map compilation. Pass points are usually chosen at classical points. See CLASSICAL POINT and TIE POINT.

PATTERN - 1) In a photo image, the regularity and characteristic placement of tones or textures. 2) The relations between any more-or-less independent parameters of a response; e.g., the pattern in the frequency domain of the response from an object.

PEAK - A top of a mountain or hill, standing above the level of the range or the surrounding country.

PEDIMENT - In arid and semi-arid regions, the gently sloping plain strewn with boulders that borders the mountains.