

ABERRATION

THE FAILURE OF RAYS OF LIGHT COMING FROM ONE POINT THROUGH A LENS OR REFLECTING FROM A MIRROR, TO CONVERGE TO ONE FOCUS.

ALIGNING BRACKET

A CLAMPING AND/OR ADJUSTING DEVICE WHICH HOLDS AN OPTICAL INSTRUMENT AND PERMITS ALIGNMENT OF THIS INSTRUMENT WITH THE PREDETERMINED LINE OF SIGHT.

ALIGNMENT LASER

A SPECIALLY MANUFACTURED LASER WHERE A LASER TUBE IS MOUNTED IN A CYLINDRICAL HOUSING MACHINED TO NAS SPECIFICATIONS WHOSE BEAM IS PARALLEL AND CENTERED TO ITS MECHANICAL AXIS.

ALIGNMENT TELESCOPE

A PRECISION REFRACTING TELESCOPE CONTAINING CROSS HAIRS WHERE THE OPTICAL AND MECHANICAL AXES ARE MADE COINCIDENT.

ANGSTROM UNIT

A UNIT OF MEASUREMENT OF WAVELENGTH OF LIGHT. ONE ANGSTROM UNIT (A) EQUALS ONE HUNDRED MILLIONTH OF A CENTIMETER OR 10^{-10} METERS. HELIUM-NEON LASER LIGHT HAS A WAVELENGTH OF 6328 ANGSTROM UNITS.

AUTO-COLLIMATING LASER

THE AUTO-COLLIMATING LASER IS SIMILAR TO THE ALIGNMENT LASER AND IT CAN BE USED FOR BOTH ALIGNMENT AND AUTO-COLLIMATION.

AUTO-COLLIMATION

THE PROCESS OF COLLIMATING AN INSTRUMENT TO THE IMAGE OF ITS OWN RETICLE REFLECTED FROM A MIRROR. RETICLE ILLUMINATION IS REQUIRED. LACK OF PERPENDICULARITY TO THE MIRROR IS SEEN AS REGISTER ERROR BETWEEN THE INSTRUMENT RETICLE AND THE REFLECTED RETICLE IMAGE.

AUTO-COLLIMATOR

AN INSTRUMENT WHICH PERMITS THE MEASUREMENT OF SMALL ANGULAR DEVIATIONS OF PERPENDICULARITY TO A MIRROR FROM A LINE OF SIGHT BY MEANS OF ITS OWN COLLIMATED LIGHT.

AUTO-REFLECTION

THE PROCESS OF VIEWING THE IMAGE OF THE OBJECTIVE END OF A TELESCOPE OR A TARGET PLACED AT THE OBJECTIVE END OF A TELESCOPE REFLECTED FROM A MIRROR.

AZIMUTH

ANGULAR ROTATION OF AN OPTICAL INSTRUMENT, IN A HORIZONTAL PLANE, AROUND A VERTICAL AXIS.

BASE PLANE

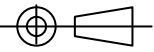
A PLANE, ESTABLISHED BY THREE OR MORE POINTS, USED AS A PRIMARY REFERENCE.

BUCKING-IN

THE PROCESS OF ALIGNING A TELESCOPE LINE OF SIGHT TO TWO OR MORE SELECTED POINTS OR TARGETS.

BUTTOCK LINE (BL) (SOMETIMES CALLED BODY LINE)

BUTTOCK LINES ARE PARALLEL TO THE VERTICAL CENTER LINE OF A STRUCTURE, AND ARE USED TO ESTABLISH DIMENSIONS, EITHER LEFT OR RIGHT OF THE CENTER LINE.

THIRD ANGLE PROJECTION		CUSTODIAN ENGINEERING MANAGEMENT COMMITTEE	REVISION 2
PROCUREMENT SPECIFICATION		TITLE GLOSSARY OF OPTICAL TOOLING TERMS	CLASSIFICATION STANDARD PRACTICE
NONE			NAS908 SHEET 1 OF 6



CLAMP, SPHERICAL MOUNT

A CLAMPING DEVICE WHICH HOLDS A SPHERICAL MOUNT ON THE MOUNTING BASE.

COINCIDENCE

THE INTERSECTION OF TWO LINES OR SUPERPOSITION OF A TARGET WITH A TELESCOPE RETICLE.

COLLIMATE

TO AIM TWO OPTICAL INSTRUMENTS AT EACH OTHER SO THEIR LINES OF SIGHT ARE PARALLEL.

COLLIMATOR

ANY OPTICAL INSTRUMENT, WHETHER FIXED FOCUS OR ADJUSTABLE FOCUS, CAPABLE OF EMITTING COLLIMATED LIGHT FROM ITS OBJECTIVE LENS, USED FOR DETERMINING ANGULAR DEVIATIONS.

COLLINEATION

THE PROCESS OF PLACING TWO INSTRUMENTS ON THE EXACT SAME LINE OF SIGHT, SIMULTANEOUS LINEAR AND ANGULAR ALIGNMENT.

COLLINEATOR

AN INSTRUMENT USED FOR DETERMINING LINEAR AND ANGULAR DEVIATIONS FROM THE LINE OF SIGHT.

CROSSHAIRS

A CROSS PATTERN ON A RETICLE CENTERED ON THE OPTICAL AXIS WITHIN A TELESCOPE.

DIFFRACTION

THE BENDING OR SPREADING OUT OF LIGHT WAVES AROUND OBSTACLES IN THEIR PATH.

DISPLACEMENT

A PARALLEL OFFSET OF A LINE OF SIGHT FROM ITS ORIGINAL POSITION.

DISPLACEMENT TARGET

THE GRADUATED PATTERN OF A OPTICAL TARGET, WHICH IS USED TO DETECT OR MEASURE HORIZONTAL AND VERTICAL DISPLACEMENT.

DUMPING

MOVING OF A JIG TRANSIT OR THEODOLITE TELESCOPE ABOUT ITS HORIZONTAL AXIS AND ROTATION OF THE STANDARD AROUND THE VERTICAL AXIS.

ERECTED IMAGE

AN IMAGE IN THE SAME POSITION AS THE SIGHTED OBJECT, WITH THE TOP SIDE UP AND THE RIGHT SIDE ON THE RIGHT.

ERECTION LENS

A LENS BETWEEN THE EYEPIECE AND THE RETICLE OF A TELESCOPE TO GIVE NORMAL APPEARANCE OF THE OBJECT VIEWED.

FIRST-SURFACE MIRROR

A MIRROR WITH THE FRONT OR NEAR SURFACE OF THE GLASS COATED TO REFLECT LIGHT RATHER THAN THE BACK OR FAR SIDE.

FOCAL LENGTH

THE SPECIFIC DISTANCE BETWEEN THE CENTER OF A LENS (NODAL POINT) AND ITS PRINCIPLE FOCUS.

FOCAL PLANE

A PLANE PERPENDICULAR TO THE OPTICAL AXIS OF A LENS INTERSECTING WITH THE FOCUS OF A COLLIMATED OBJECT.

REVISION

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