

9. ABBREVIATIONS AND LETTER SYMBOLS

9.1. Abbreviations and letter symbols are used to save space and to avoid distracting the reader by use of repetitious words or phrases.

9.2. The nature of the publication governs the extent to which abbreviations are used. In text of technical and legal publications, and in parentheses, brackets, footnotes, sidenotes, tables, leaderwork, and bibliographies, many words are frequently abbreviated. Heads, legends, tables of contents, and indexes follow the style of the text.

9.3. Internal and terminal punctuation in symbols representing units of measure are to be omitted to conform with practice adopted by scientific, technical, and industrial groups. Where omission of terminal punctuation causes confusion; e.g., the symbol *in* (inch) mistaken for the preposition *in*, the symbol should be spelled out.

9.4. Standard and easily understood forms are preferable, and they should be uniform throughout a job. Abbreviations not generally known should be followed in the text by the spelled-out forms in parentheses the first time they occur; in tables and leaderwork such explanatory matter should be supplied in a footnote. As the printer cannot rewrite the copy, the author should supply these explanatory forms.

9.5. In technical matter, symbols for units of measure should be used only with figures; similarly, many other abbreviations and symbols should not appear in isolation. For example, energy is measured in foot-pounds, *not* energy is measured in ft•lbs.

Capitals, hyphens, periods (points), and spacing

9.6. In general, an abbreviation follows the capitalization and hyphenation of the word or words abbreviated. It is followed by a period unless otherwise indicated.

c.o.d.

St.

but ft•lb

9.7. Abbreviations and initials of a personal name with points are set without spaces. Abbreviations composed of contractions and initials or numbers, will retain space.

H.S.T.

J.F.K.

L.B.J.

U.S.

U.N.

U.S.C. (*but* Rev. Stat.)

B.S., LL.D., Ph.D., B.Sc.

H.R. 116 (*but* S. 116, S. Con.
Res. 116)

C.A.D.C. (*but* App. D.C.)

A.B. Secrest, D.D.S.

A.F. of L.-CIO (AFL-CIO preferred)	<i>but</i> AT&T
A.D., B.C.	Texas A&M
e.s.t.	R&D
i.e., e.g. (<i>but op. cit.</i>)	

9.8. Except as otherwise designated, points and spaces are omitted after initials used as shortened names of governmental agencies and of other organized bodies. "Other organized bodies" shall be interpreted to mean organized bodies that have become popularly identified with a symbol, such as MIT (Massachusetts Institute of Technology), GM (General Motors), GMAC (General Motors Acceptance Corp.), etc. (See "List of Abbreviations.") Symbols, when they appear in copy, may be used for acts of Congress. Example: ARA (Area Redevelopment Act).

VFW	TVA	ARC
NLRB	AFL-CIO	ASTM

Geographic terms

9.9. *United States* must be spelled out when appearing in a sentence containing the name of another country. The abbreviation *U.S.* will be used when preceding the word *Government* or the name of a Government organization, except in formal writing (treaties, Executive orders, proclamations, etc.); congressional bills; legal citations and courtwork; and covers and title pages.

- U.S. Government
- U.S. Congress
- U.S. Department of Health and Human Services
- U.S. district court
- U.S. Supreme Court (*but* Supreme Court of the United States)
- U.S. Army (*but* Army of the United States)
- U.S. monitor *Nantucket*
- U.S.-NATO assistance
- U.S. Government efforts to control inflation must be successful if the United States is to have a stable economy.

but British, French, and United States Governments; United States-British talks

9.10. With the exceptions in the preceding rule, the abbreviation *U.S.* is used in the adjective position, but is spelled out when used as a noun.

U.S. foreign policy	United States Steel Corp. (legal title)
U.S. farm-support program	Foreign policy of the United States
U.S. attorney	
U.S. citizen	
United States Code (official title)	<i>not</i> Temperatures vary in the U.S.

9.11. The names of foreign countries are not abbreviated, with the exception of the former U.S.S.R., which is abbreviated due to its length.

9.12. In other than formal usage as defined in rule 9.9, all States of the United States, the Canal Zone, Puerto Rico, and the Virgin Islands are abbreviated immediately following any capitalized geographic term, including armory, arsenal, airbase, airport, barracks,

depot, fort, Indian agency, military camp, national cemetery (also forest, historic site, memorial, seashore, monument, park), naval shipyard, proving ground, reservation (forest, Indian, or military), and reserve or station (military or naval).

Prince George's County, MD	Arlington National Cemetery, VA
Mount Rainier National Forest, WA	Aberdeen Proving Ground, MD
Stone Mountain, GA	Baltimore-Washington International Airport, MD
National Naval Medical Center, Bethesda, MD	Redstone Arsenal, AL
Mark Twain National Wildlife Refuge, IL-IA-MO (note use of hyphens here)	<i>but</i> Leavenworth freight yards, Kansas
Richmond, VA	Altoona sidetrack, Wisconsin

9.13. The Postal Service style of two-letter State, Province, and Freely Associated State abbreviations is to be used.

UNITED STATES (INCLUDING FREELY ASSOCIATED STATES)

AL Alabama	IN Indiana	ND North Dakota
AK Alaska	IA Iowa	OH Ohio
AZ Arizona	KS Kansas	OK Oklahoma
AR Arkansas	KY Kentucky	OR Oregon
AS American Samoa	LA Louisiana	PA Pennsylvania
CA California	ME Maine	PR Puerto Rico
CO Colorado	MD Maryland	RI Rhode Island
CT Connecticut	MA Massachusetts	SC South Carolina
CZ Canal Zone	MI Michigan	SD South Dakota
DE Delaware	MN Minnesota	TN Tennessee
DC District of Columbia	MS Mississippi	TX Texas
FL Florida	MO Missouri	UT Utah
FM Federated States of Micronesia	MT Montana	VT Vermont
GA Georgia	NE Nebraska	VA Virginia
GU Guam	NV Nevada	VI Virgin Islands
HI Hawaii	NH New Hampshire	WA Washington
ID Idaho	NJ New Jersey	WV West Virginia
IL Illinois	NM New Mexico	WI Wisconsin
	NY New York	WY Wyoming
	NC North Carolina	

CANADA

AB Alberta	NF Newfoundland	PE Prince Edward Island
BC British Columbia	NT Northwest Territories	PQ Quebec
LB Labrador	NS Nova Scotia	SK Saskatchewan
MB Manitoba	ON Ontario	YT Yukon Territory
NB New Brunswick		

9.14. The names of other insular possessions, trust territories, and *Long Island, Staten Island, etc.*, are not abbreviated.

9.15. The names of Canadian Provinces and other foreign political subdivisions are not abbreviated except as noted in rule 9.13.

Addresses

9.16. Words such as *Street, Avenue, Place, Road, Square, Boulevard, Terrace, Drive, Court, and Building*, following a name or number, are abbreviated in footnotes, sidenotes, tables, leaderwork, and lists.

9.17. In addresses, a single period is used with the abbreviations *NW., SW., NE., SE.* (indicating sectional divisions of cities) follow-

ing name or number. *North*, *South*, *East*, and *West* are spelled out at all times.

9.18. The word *Street* or *Avenue* as part of a name is not abbreviated even in parentheses, footnotes, sidenotes, tables, lists, and leaderwork.

14th Street Bridge

Ninth Avenue Bldg.

9.19. The words *County*, *Fort*, *Mount*, *Point*, and *Port* are not abbreviated. *Saint* (*St.*) and *Sainte* (*Ste.*) should be abbreviated.

Descriptions of tracts of land

9.20. If fractions are spelled out in land descriptions, *half* and *quarter* are used (not *one-half* nor *one-quarter*).

south half of T. 47 N., R. 64 E.

9.21. In the description of tracts of public land the following abbreviations are used (periods are omitted after abbreviated compass directions that immediately precede and close up on figures):

SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 4, T. 12 S., R. 15 E., of the Boise Meridian

lot 6, NE $\frac{1}{4}$ sec. 4, T. 6 N., R. 1 W.

N $\frac{1}{2}$ sec. 20, T. 7 N., R. 2 W., sixth principal meridian

Tps. 9, 10, 11, and 12 S., Rs. 12 and 13 W.

T. 2 S., Rs. 8, 9, and 10 E., sec. 26

T. 3 S., R. 1 E., sec. 34, W $\frac{1}{2}$ E $\frac{1}{2}$, W $\frac{1}{2}$, and W $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32 (with or without a township number)

9.22. In case of an unavoidable break in a land-description symbol group at end of a line, use no hyphen and break after fraction.

Names and titles

9.23. The following forms are not always abbreviations, and copy should be followed as to periods:

Al
Alex

Ben
Ed

Fred
Sam

Walt
Will

9.24. In signatures, an effort should be made to retain the exact form used by the signer.

George Wythe

Geo. Taylor

9.25. In company and other formal names, if it is not necessary to preserve the full legal title, such forms as *Bro.*, *Bros.*, *Co.*, *Corp.*, *Inc.*, *Ltd.*, and *&* are used. *Association* and *Manufacturing* are not abbreviated.

Radio Corp. of America
Aluminum Co. of America
Standard Oil Co. of New Jersey
Ronald G. Brown & Bro.
Jones Bros. & Co.
American Telephone & Telegraph Co.
Norton Enterprises, Inc.
Maryland Steamship Co., Ltd.
Chesapeake & Delaware Canal
Fairmount Building & Loan Association
Electronics Manufacturing Co.

Texas College of Arts & Industries
National Barrel & Drum Association
Robert Wilson & Associates, Inc.
U.S. News & World Report
Baltimore & Ohio Railroad
Mine, Mill & Smelter Workers

but

Little Theater Company
Senate Banking, Housing and
Urban Affairs Committee

9.26. *Company* and *Corporation* are not abbreviated in names of Federal Government units.

Commodity Credit Corporation
 Federal Savings and Loan Insurance Corporation
 Pension Benefit Guaranty Corporation

9.27. In parentheses, footnotes, sidenotes, tables, and leaderwork, abbreviate the words *railroad* and *railway* (*RR.* and *Ry.*), except in such names as “Washington Railway & Electric Co.” and “Florida Railroad & Navigation Corp.” *SS* for *steamship*, *MS* for *motorship*, etc., preceding name are used at all times.

9.28. In the names of informal companionships the word *and* is spelled out.

Gilbert and Sullivan Currier and Ives

9.29. In other than formal usage, a civil, military, or naval title preceding a name is abbreviated if followed by first or given name or initial; but *Mr.*, *Mrs.*, *Miss*, *Ms.*, *M.*, *MM.*, *Messrs.*, *Mlle.*, *Mme.*, and *Dr.* are abbreviated with or without first or given name or initial.

ARMY, AIR FORCE, AND MARINE CORPS OFFICERS

GEN	General	CPT	Captain
LTG	Lieutenant General	1LT	First Lieutenant
MG	Major General	2LT	Second Lieutenant
BG	Brigadier General	MWO	Master Warrant Officer (Army)
COL	Colonel	CWO	Chief Warrant Officer
LTC	Lieutenant Colonel	WO	Warrant Officer
MAJ	Major		

NAVY OFFICERS

ADM	Admiral	LCDR	Lieutenant Commander
VADM	Vice Admiral	LT	Lieutenant
RADM	Rear Admiral	LTJG	Lieutenant Junior Grade
COMO	Commodore	ENS	Ensign
CAPT	Captain	WO	Warrant Officer
CDR	Commander		

ARMY ENLISTED PERSONNEL

SMA	Sergeant Major of the Army	1SG	First Sergeant
CSM	Command Sergeant Major	MSG	Master Sergeant
SGM	Sergeant Major	PSG	Platoon Sergeant
SFC	Sergeant First Class	PFC	Private First Class
SSG	Staff Sergeant	PVT	Private
SGT	Sergeant	SP4	Specialist Fourth Class
CPL	Corporal		

MARINE CORPS ENLISTED PERSONNEL

MGySgt	Master Gunnery Sergeant	Sgt	Sergeant
1stSgt	First Sergeant	Cpl	Corporal
MSgt	Master Sergeant	LCpl	Lance Corporal
GySgt	Gunnery Sergeant	PFC	Private First Class
SSgt	Staff Sergeant	PVT	Private

AIR FORCE ENLISTED PERSONNEL

CMSgt	Chief Master Sergeant	Sgt	Sergeant
SMSgt	Senior Master Sergeant	SrA	Senior Airman
MSgt	Master Sergeant	A1C	Airman First Class
TSgt	Technical Sergeant	Amn	Airman
SSgt	Staff Sergeant		

9.30. Spell out *Senator*, *Representative*, and *commandant*.

9.31. Unless preceded by *the*, abbreviate *Honorable*, *Reverend*, and *Monsignor* when followed by the first name, initials, or title.

Hon. Elihu Root; the Honorable Elihu Root; the Honorable Mr. Root
the Honorables William H. Rehnquist, John Paul Stevens, and Sandra
Day O'Connor
Rev. Martin Luther King, Jr.; the Reverend Dr. King; Rev. Dr. King;
Reverend King (*not* Rev. King, *nor* the Reverend King)
Rt. Rev. James E. Freeman; the Right Reverend James E. Freeman;
Very Rev. Henry Boyd; the Very Reverend Henry Boyd
Rt. Rev. Msgr. John Bird; the Right Reverend Monsignor John Bird

9.32. The following and similar forms are used after a name:

Esq., Jr., Sr.
2d, 3d (*or* II, III) (*not* preceded by comma)
Degrees: LL.D., M.A., Ph.D., etc.
Fellowships, orders, etc.: FSA Scot, F.R.S., K.C.B., C.P.A., etc.

9.33. The abbreviation *Esq.* and other titles such as *Mr.*, *Mrs.*, and *Dr.*, should not appear with any other title or with abbreviations indicating scholastic degrees.

John L. Smith, Esq., *not* Mr. John L. Smith, Esq., *nor* John L. Smith,
Esq., A.M.; *but* James A. Jones, Jr., Esq.
Ford Maddox, A.B., Ph.D., *not* Mr. Ford Maddox, A.B., Ph.D.
George Gray, M.D., *not* Mr. George Gray, M.D., *nor* Dr. George Gray,
M.D.
Dwight A. Bellinger, D.V.M.

9.34. *Sr.* and *Jr.* should not be used without first or given name or initials, but may be used in combination with any title.

A.K. Jones, Jr., or Mr. Jones, Junior, *not* Jones, Jr., *nor* Jones, Junior
President J.B. Nelson, Jr.

9.35. When name is followed by abbreviations designating religious and fraternal orders and scholastic and honorary degrees, their sequence is as follows: Orders, religious first; theological degrees; academic degrees earned in course; and honorary degrees in order of bestowal.

Henry L. Brown, D.D., A.M., D.Lit.
T.E. Holt, C.S.C., S.T.Lr., LL.D., Ph.D.
Samuel J. Deckelbaum, P.M.

9.36. Academic degrees standing alone may be abbreviated.

John was graduated with a B.A. degree; *but* bachelor of arts degree
(lowercase when spelled out).
She earned her Ph.D. by hard work.

9.37. In addresses, signatures, lists of names, and leaderwork but not in tables nor in centerheads, *Mr.*, *Mrs.*, and other titles

preceding a name, and *Esq.*, *Jr.*, *Sr.*, *2d*, and *3d* following a name, are set in roman caps and lowercase if the name is in caps and small caps. If the name is in caps, they are set in caps and small caps, if small caps are available—otherwise in caps and lowercase.

Parts of publications

9.38. The following abbreviations are used for parts of publications mentioned in parentheses, brackets, footnotes, sidenotes, list of references, tables, and leaderwork, when followed by figures, letters, or Roman numerals.

app., apps. (appendix, appendixes)	pt., pts. (part, parts)
art., arts. (article, articles)	sec., secs. (section, sections)
bull., bulls. (bulletin, bulletins)	subch., subchs. (subchapter, subchapters)
ch., chs. (chapter, chapters)	subpar., subpars. (subparagraph, subparagraphs)
col., cols. (column, columns)	subpt., subpts. (subpart, subparts)
ed., eds. (edition, editions)	subsec., subsecs. (subsection, subsections)
fig., figs. (figure, figures)	supp., supps. (supplement, supplements)
No., Nos. (number, numbers)	vol., vols. (volume, volumes)
p., pp. (page, pages)	
par., pars. (paragraph, paragraphs)	
pl., pls. (plate, plates)	

9.39. The word *article* and the word *section* are abbreviated when appearing at the beginning of a paragraph and set in caps and small caps followed by a period and an en space, except that the first of a series is spelled out.

ART. 2; SEC. 2; etc.; *but* ARTICLE 1; SECTION 1

ART. II; SEC. II; etc.; *but* ARTICLE I; SECTION I

9.40. At the beginning of a legend, the word *figure* preceding the legend number is not abbreviated.

FIGURE 4.—Landscape.

Terms relating to Congress

9.41. The words *Congress* and *session*, when accompanied by a numerical reference, are abbreviated in parentheses, brackets, and text footnotes. In sidenotes, lists of references, tables, leaderwork, and footnotes to tables and leaderwork, the following abbreviations are used:

106th Cong., 1st sess.	Public Law 84, 102d Cong.
1st sess., 106th Cong.	Private Law 68, 102d Cong.

9.42. In references to bills, resolutions, documents and reports in parentheses, brackets, footnotes, sidenotes, tables, and leaderwork, the following abbreviations are used:

H.R. 416 (House bill)	H.J. Res. 21 (House joint resolution)
S. 116 (Senate bill)	S. Res. 50 (Senate resolution)
The examples above may be abbreviated or spelled out in text.	S. Con. Res. 17 (Senate concurrent resolution)
H. Res. 5 (House resolution)	S.J. Res. 45 (Senate joint resolution)
H. Con. Res. 10 (House concurrent resolution)	

H. Conf. Rept. 10 (House conference report)	Ex. Doc. B (Executive document)
H. Doc. 35 (House document)	Ex. F (92d Cong., 2d sess.)
S. Doc. 62 (Senate document)	Ex. Rept. 9 (92d Cong., 1st sess.)
H. Rept. 214 (House report)	Misc. Doc. 16 (miscellaneous document)
S. Rept. 410 (Senate report)	Public Res. 47

9.43. References to statutes in parentheses, footnotes, sidenotes, tables, leaderwork, and congressional work are abbreviated.

Rev. Stat. (Revised Statutes); 43 Rev. Stat. 801; 18 U.S.C. 38
 Supp. Rev. Stat. (Supplement to the Revised Statutes)
 Stat. L. (Statutes at Large)

but Public Law 85–1; Private Law 68

Calendar divisions

9.44. Names of months followed by the day, or day and year, are abbreviated in footnotes, tables, leaderwork, sidenotes, and in bibliographies. (See examples, rule 9.45.) *May*, *June*, and *July* are always spelled out. In narrow columns in tables, however, the names of months may be abbreviated even if standing alone. Preferred forms follow:

Jan.	Apr.	Oct.
Feb.	Aug.	Nov.
Mar.	Sept.	Dec.

9.45. In text only, dates as part of a citation or reference within parentheses or brackets are also abbreviated.

(Op. Atty. Gen., Dec. 4, 1985)
 (Congressional Record, Sept. 25, 1981)
 [From the New York Times, Mar. 4, 1978]
 [From the Mar. 4 issue]

On Jan. 25 (we had commenced on Dec. 26, 1977) the work was finished. (In footnotes, tables, leaderwork, and sidenotes)

On January 25, a decision was reached (Op. Atty. Gen., Dec. 4, 1975). (Text, but with citation in parentheses)

but On January 25 (we had commenced on December 26, 1967) the work was finished. (Not a citation or reference in text)

9.46. Weekdays are not abbreviated, but the following forms are used, if necessary, in lists or in narrow columns in tables:

Sun.	Wed.	Fri.
Mon.	Thurs.	Sat.
Tues.		

Time zones

9.47. The following forms are to be used when abbreviating names of time zones:

A.s.t., Atlantic standard time	G.c.t., Greenwich civil time
A.t., Atlantic time	G.m.a.t., Greenwich mean astronomical time
c.s.t., central standard time	G.m.t., Greenwich mean time
c.t., central time	l.s.t., local standard time
d.s.t., daylight saving (no "s") time	m.s.t., mountain standard time
e.d.s.t., eastern daylight saving time	m.t., mountain time
e.d.t., eastern daylight time	P.s.t., Pacific standard time
e.s.t., eastern standard time	P.t., Pacific time
e.t., eastern time	UTC, universal time coordinated

Acronyms, coined words, and symbols

9.48. To obtain uniform treatment in the formation of acronyms, coined words, and symbols, apply the formulas that follow:

Use all capital letters when only the first letter of each word or selected words is used to make up the symbol:

- APPR (Army package power reactor)
- EPCOT (Experimental Prototype Community of Tomorrow)
- MAG (Military Advisory Group)
- MIRV (multiple independently targetable reentry vehicle)
- SALT (strategic arms limitation talks); (*avoid* SALT talks)
- STEP (supplemental training and employment program)

Use all capital letters where first letters of prefixes and/or suffixes are utilized as part of established expressions:

- CPR (*cardiopulmonary resuscitation*)
- ESP (*extrasensory perception*)
- FLIR (*forward-looking infrared*)

Copy must be followed where an acronym or abbreviated form is copy-righted or established by law:

- ACTION (agency of Government; not an acronym)
- MarAd (*Maritime Administration*)
- NACo (*National Association of Counties*)
- MEDLARS (*Medical Literature Analysis and Retrieval System*)

Use caps and lowercase when proper names are used in shortened form, any word of which uses more than the first letter of each word:

- Conrail (*Consolidated Rail Corporation*)
- Pepco (*Potomac Electric Power Co.*)
- Inco (*International Nickel Co.*)
- Aramco (*Arabian-American Oil Co.*)
- Unprofor (*United Nations Protection Force*)

Use lowercase in common-noun combinations made up of more than the first letter of lowercased words:

- loran (*long-range navigation*)
- sonar (*sound navigation ranging*)
- secant (*separation control of aircraft by nonsynchronous techniques*)

9.49. The words *infra* and *supra* are not abbreviated.

Terms of measure

9.50. Compass directions are abbreviated as follows:

N.	S.	ESE.
NE.	NNW.	10° N. 25° W.
E.	W.	NW. by N. ¼ W.
SW.		

9.51. The words *latitude* and *longitude*, followed by figures, are abbreviated in parentheses, brackets, footnotes, sidenotes, tables, and leaderwork, and the figures are always closed up.

lat. 52°33'05" N.

long. 13°21'10" E.

9.52. Avoid breaking latitude and longitude figures at end of line; space out line instead. In case of an unavoidable break at end of line, use hyphen.

9.53. Temperature and gravity are expressed in figures. When the degree mark is used, it must appear closed up to the capital

letter, not against the figures. Note the following related abbreviations and letter symbols and their usages:

abs, absolute	API, American Petroleum Institute
Bé, Baumé	Twad, Twaddell
°C, ¹ degree Celsius ²	100 °C
°F, degree Fahrenheit	212 °F ¹
°R, degree Rankine	671.67 °R
K, kelvin	18 °API
273.15 K	
°API	

9.54. References to meridian in statements of time are abbreviated as follows:

10 a.m. (<i>not</i> 10:00 a.m.)	12 a.m. (formerly 12 m.) (noon)
2:30 p.m.	12 p.m. (midnight)

9.55. The word *o'clock* is not used with abbreviations of time.

not 10 o'clock p.m.

9.56. Metric unit letter symbols are set lowercase roman unless the unit name has been derived from a proper name, in which case the first letter of the symbol is capitalized (for example Pa for pascal and W for watt). The exception is the letter L for liter. The same form is used for singular and plural. The preferred symbol for *cubic centimeter* is *cm*³; use *cc* only when requested.

A space is used between a figure and a unit symbol except in the case of the symbols for degree, minute, and second of plane angle.

3 m 45 mm 25 °C *but* 33°15'21"

Prefixes for multiples and submultiples

E	exa (10 ¹⁸)	d	deci (10 ⁻¹)
P	peta (10 ¹⁵)	c	centi (10 ⁻²)
T	tera (10 ¹²)	m	milli (10 ⁻³)
G	giga (10 ⁹)	μ	micro (10 ⁻⁶)
M	mega (10 ⁶)	n	nano (10 ⁻⁹)
k	kilo (10 ³)	p	pico (10 ⁻¹²)
h	hecto (10 ²)	f	femto (10 ⁻¹⁵)
da	deka (10)	a	atto (10 ⁻¹⁸)

Metric units

m	meter (for length)
g	gram (for weight or mass)
L	liter (for capacity)

Length

km	kilometer
hm	hectometer
dam	dekameter
m	meter
dm	decimeter
cm	centimeter
mm	millimeter

Area

km ²	square kilometer
hm ²	square hectometer
dam ²	square dekameter
m ²	square meter
dm ²	square decimeter
cm ²	square centimeter
mm ²	square millimeter

Volume

km ³	cubic kilometer
hm ³	cubic hectometer
dam ³	cubic dekameter
m ³	cubic meter
dm ³	cubic decimeter
cm ³	cubic centimeter
mm ³	cubic millimeter

¹ Without figures preceding it, °C or °F should be used only in boxheads and over figure columns in tables.

² Preferred form (superseding Centigrade) approved by Ninth General Conference on Weights and Measures, October 1948.

<i>Weight</i>		<i>Land area</i>		<i>Capacity of containers</i>	
kg	kilogram	ha	hectare	kL	kiloliter
hg	hectogram	a	acre	hL	hectoliter
dag	dekagram			daL	dekaliter
g	gram			L	liter
dg	decigram			dL	deciliter
cg	centigram			cL	centiliter
mg	milligram			mL	milliliter
μg	microgram				

9.57. A similar form of abbreviation applies to any unit of the metric system.

A	ampere	V	volt	mF	millifarad
VA	voltampere	W	watt	mH	millihenry
F	fared	kc	kilocycle	μF	microfarad (one-millionth of a farad)
H	Henry	kV	kilovolt		
Hz	Hertz	kVA	kilovoltampere		
J	joule	kW	kilowatt		

9.58. The following forms are used when units of English weight and measure and units of time are abbreviated, the same form of abbreviation being used for both singular and plural:

		<i>Length</i>		<i>Area and volume</i>	
		in	inch	in ²	square inch
		ft	foot	in ³	cubic inch
		yd	yard	mi ²	square mile
		mi	mile (statute)	ft ³	cubic foot

<i>Time</i>		<i>Weight</i>		<i>Capacity</i>	
yr	year	gr	grain	gill	(not abbreviated)
mo	month	dr	dram	pt	pint
d	day	oz	ounce	qt	quart
h	hour	lb	pound	gal	gallon
min	minute	cwt	hundredweight	pk	peck
s	second	dwt	pennyweight	bu	bushel
		ton(s)	(not abbreviated)	bbl	barrel
		<i>but</i> t	metric ton (tonne)		

9.59. In astrophysical and similar scientific matter, magnitudes and units of time may be expressed as follows, if so written in copy.

$$5^h 3^m 9^s$$

$$4.5^h$$

Money

9.60. The following are some of the abbreviations and symbols used for indicating money:

\$, dol (dollar)	Mex\$2,650
c, ct, ¢ (cent, cents)	P (peso)
LT175 (Turkish)	£ (pound)
US\$15,000	d (pence)

Use “US\$” if omission would result in confusion.

(For the abbreviations of other terms indicating currency, see the table “Foreign Money” in “Useful Tables.”)

LIST OF ABBREVIATIONS

Standard word abbreviations

9.61. If abbreviations are required, use these forms:

- | | |
|---|---|
| AA, Alcoholics Anonymous | APPR, Army package power reactor |
| AARP, American Association of Retired Persons <i>also</i> AppleTalk Address Resolution Protocol | approx., approximately |
| abbr., abbreviation | ARC, American Red Cross |
| ABM, Asynchronous Balanced Mode | ARP, Address Resolution Protocol |
| abs., abstract | ARS, Agricultural Research Service |
| acct., account | ASCII, American Standard Code for Information Interchange |
| ACDA, Arms Control and Disarmament Agency | ASCS, Agricultural Stabilization and Conservation Service |
| ACTH, adrenocorticotropic hormone | ASME, American Society of Mechanical Engineers |
| A.D. (anno Domini), in the year of our Lord (A.D. 937) | A.S.N., Army service number |
| ADDH, attention deficit disorder with hyperactivity | ASTM, American Society for Testing and Materials |
| ADHD, attention deficit hyperactivity disorder | ATM, automatic teller machine |
| ADN, advanced digital network | Atl., Atlantic Reporter; A.2d, Atlantic Reporter, second series |
| ADP, automated data processing | AUS, Army of the United States |
| ADSL, asymmetric digital subscriber line | Ave., avenue |
| AEF, American Expeditionary Forces | AWACS, airborne warning and control system |
| AF, audiofrequency | AWOL, absent without leave |
| AFB, and similar military symbols (with name), Air Force Base | B.A. or A.B., bachelor of arts |
| AFL–CIO, American Federation of Labor and Congress of Industrial Organizations | BBB, Better Business Bureau |
| AID, Agency for International Development | BBS, bulletin board service |
| AIDS, acquired immunodeficiency syndrome | B.C., before Christ (1200 B.C.) |
| a.k.a., also known as | BCG (bacillus Calmette–Guérin), antituberculosis vaccine |
| A.L.R., American Law Reports | bf., boldface |
| AM (no periods), amplitude modulation | BGN, Board on (<i>not</i> of) Geographic Names |
| A.M. (anno mundi), in the year of the world | BIA, Bureau of Indian Affairs |
| A.M. or M.A., master of arts | BIOS, Basic Input/Output System |
| a.m. (ante meridiem), before noon | BIS, Bank for International Settlements |
| Am. Repts., American Reports | BIT, Binary digit |
| Amtrak, National Railroad Passenger Corporation | Blatch. Pr. Cas., Blatchford's Prize Cases |
| AMVETS, American Veterans of World War II; Amvet(s) (individual) | Bldg., building |
| ANSI, American National Standards Institute | B.Lit(t). or Lit(t).B., bachelor of literature |
| antilog (no period), antilogarithm | BLM, Bureau of Land Management |
| A1 (rating) | BLS, Bureau of Labor Statistics |
| AOA, Administration on Aging | Blvd., boulevard |
| API, American Petroleum Institute | b.o., buyer's option |
| APO (no periods), Army post office | BPS, bits per second |
| App. D.C., District of Columbia Appeal Cases | B.S. or B.Sc., bachelor of science |
| App. Div., Appellate Division | ca. (circa), about |
| | ca, centiare |
| | CACM, Central American Common Market |
| | CAD, computer-aided design |
| | c. and s.c., caps and small caps |
| | CAP, Civil Air Patrol |
| | CARE, Cooperative for American Remittances to Everywhere, Inc. |
| | CAT scan, computerized axial tomography |

- C.C.A., Circuit Court of Appeals
 CCC, Commodity Credit Corporation
 CCITT, Consultative Committee for International Telegraphy and Telephony
 C.Cls., Court of Claims
 C.Cls.R., Court of Claims Reports
 C.C.P.A., Court of Customs and Patents Appeals
 CCR, Commission on Civil Rights
 CDC, Centers for Disease Control
 CD-I, Compact Disk Interactive
 CD-ROM, Compact Disk—Read Only Memory
 CD-R, Compact Disk—Recordable
 CEA, Council of Economic Advisers
 cf. (confer), compare, or see
 CFR, Code of Federal Regulations
 CFR Supp., Code of Federal Regulations Supplement
 CGI, Common Gateway Interface
 CHAMPUS, Civilian Health and Medical Program of the Uniformed Services
 CIA, Central Intelligence Agency
 CIC, Counterintelligence Corps
 C.J. (corpus juris), body of law; Chief Justice
 CNN, Cable News Network
 CO, commanding officer
 Co., company (commercial)
 c.o.d., cash on delivery
 COLA, cost-of-living adjustment
 Comp. Dec., Comptroller's Decisions (Treasury)
 Comp. Gen., Comptroller General Decisions
 con., continued
 conelrad, control of electromagnetic radiation (civil defense)
 Conrail, Consolidated Rail Corporation
 Conus, continental United States Corp., corporation (commercial)
 cos (no period), cosine
 cosh (no period), hyperbolic cosine
 cot (no period), cotangent
 coth (no period), hyperbolic cotangent
 c.p., chemically pure
 C.P.A., certified public accountant
 CPI, Consumer Price Index
 CPR, cardiopulmonary resuscitation
 CPU, central processing unit (computer)
 cr., credit; creditor
 C-SPAN, Cable Satellite Public Affairs Network
 csc (no period), cosecant
 csch (no period), hyperbolic cosecant
 CTI, computer-telephony integration
 Ct., court
 Dall., Dallas (U.S. Supreme Court Reports)
 DAR, Daughters of the American Revolution
 d.b.a., doing business as
 d.b.h., diameter at breast height
 DBMS, database management system
 D.D., doctor of divinity
 D.D.S., doctor of dental surgery
 DDT, dichlorodiphenyltrichloroethane
 DEW, distant early warning (DEW line)
 Dist. Ct., District Court
 D.Lit(t). or Lit(t).D., doctor of literature
 DMI, Desktop Management Interface
 DNC, Domestic Names Committee (BGN)
 DNS, Domain Name Service
 do. (ditto), the same
 DOC, Department of Commerce
 DOD, Department of Defense
 DOE, Department of Energy
 DOJ, Department of Justice
 DOL, Department of Labor
 DOS, Department of State; disk operating system
 DOT, Department of Transportation
 DP (no periods), displaced person
 D.P.H., doctor of public health
 dpi, dots per inch
 D.P.Hy., doctor of public hygiene
 DPT, diphtheria, pertussis, tetanus inoculation
 dr., debit; debtor
 Dr., doctor; drive
 DSSL, Document Style and Semantics Language
 d.s.t., daylight saving (no "s") time
 DTP, desktop publishing
 DVD, digital video disk
 D.V.M., doctor of veterinary medicine
 E., east
 EBCDIC, Extended Binary Coded Decimal Interchange Code
 e-mail, electronic mail
 EEOC, Equal Employment Opportunity Commission
 EFTA, European Free Trade Association
 EFTS, electronic funds transfer system
 e.g. (exempli gratia), for example
 EHF, extremely high frequency
 8°, octavo
 emcee, master of ceremony
 e.o.m., end of month
 EOP, Executive Office of the President
 EPA, Environmental Protection Agency

- EPS, Encapsulated PostScript file
 ERP, European Recovery Program
 et al. (et alii), and others
 et seq. (et sequentia), and the
 following
 etc. (et cetera), and so forth
 EU, European Union
 Euratom, European Atomic
 Energy Community
 Euro, currency (common)
 Eurodollars, U.S. dollars used to
 finance foreign trade
 Ex. Doc. (with letter), executive
 document
 Ex-Im Bank, Export-Import Bank
 of the United States
 f., ff., and following page (pages)
 FAA, Federal Aviation
 Administration
 FACS, Faculty of the American
 College of Surgeons
 FAO, Food and Agriculture
 Organization
 f.a.s., free alongside ship
 FAS, Foreign Agricultural Service
 FBB, Federal Bulletin Board
 FBI, Federal Bureau of
 Investigation
 FCA, Farm Credit Administration
 FCC, Federal Communications
 Commission
 FCIC, Federal Crop Insurance
 Corporation
 FCSC, Foreign Claims Settlement
 Commission
 FDA, Food and Drug
 Administration
 FDDI, Fiber Distributed Data
 Interface
 FDIC, Federal Deposit Insurance
 Corporation
 FDLP, Federal Depository Library
 Program
 Fed., Federal Reporter; F.3d,
 Federal Reporter, third series
 FEOF, Foreign Exchange
 Operations Fund
 FHA, Federal Housing
 Administration
 FmHA, Farmers Home
 Administration
 FHLBB, Federal Home Loan Bank
 Board
 FHWA, Federal Highway
 Administration
 FICA, Federal Insurance
 Contributions Act
 FIPS, Federal Information
 Processing Standards
 FLSA, Fair Labor Standards Act
 FM, frequency modulation
 FMC, Federal Maritime
 Commission
 FMCS, Federal Mediation and
 Conciliation Service
 FNMA, Federal National
 Mortgage Association (Fannie
 Mae)
 FNS, Food and Nutrition Service
 FOSI, Format Output
 Specification Instance
 f°, folio
 f.o.b., free on board
 4°, quarto
 FPC, Federal Power Commission
 FPO (no periods), fleet post office
 FR, Federal Register (publication)
 FRG, Federal Republic of
 Germany
 FRS, Federal Reserve System
 FS, Forest Service
 FSLIC, Federal Savings and Loan
 Insurance Corporation
 FSS, Federal Supply Service
 F.Supp., Federal Supplement
 FTC, Federal Trade Commission
 FTP, File Transfer Protocol
 FWS, Fish and Wildlife Service
 GAO, General Accounting Office
 GATT, General Agreement on
 Tariffs and Trade
 GB, gigabyte
 GDI, Graphical Device Interface
 GDR, German Democratic
 Republic
 GGP, Gateway-to-Gateway
 Protocol
 GI, general issue; Government
 issue
 GIF, Graphical Interchange
 Format
 GILS, Government Information
 Locator Service
 GIS, Geographic Information
 System
 G.M.&S., general, medical, and
 surgical
 GNMA, Government National
 Mortgage Association (Ginnie
 Mae)
 GNP, gross national product
 Gov., Governor
 GPO, Government Printing Office
 gr. wt., gross weight
 GSA, General Services
 Administration
 GSE, Government-Sponsored
 Enterprise
 GUI, Graphical User Interface
 H.C., House of Commons
 H. Con. Res. (with number),
 House concurrent resolution
 H. Doc. (with number), House
 document
 hazmat, hazardous material
 HE (no periods), high explosive
 HF (no periods), high frequency
 HHS, Health and Human Services
 (Department of)
 HIV, human immunodeficiency
 virus

- H.J. Res. (with number), House joint resolution
HMO, health-maintenance organization
HOV, high-occupancy vehicle
How., Howard (U.S. Supreme Court Reports)
H.R. (with number), House bill
H. Rept. (with number), House report
H. Res. (with number), House resolution
HTML, HyperText Markup Language
HTTP, HyperText Transfer Protocol
HTTPD, HyperText Transfer Protocol Daemon
HUD, Housing and Urban Development
HYTELNET, HyperText-browser for Telnet Accessible Sites
IADB, Inter-American Defense Board
IAEA, International Atomic Energy Agency
ibid. (ibidem), in the same place
ICBM, intercontinental ballistic missile
ICC, Interstate Commerce Commission
ICMP, Internet Control Message Protocol
id. (idem), the same
IDA, International Development Association
IDE, integrated drive electronics
i.e. (id est), that is
IEEE, Institute of Electrical and Electronic Engineers
IF (no periods), intermediate frequency
IFC, International Finance Corporation
IMCO, Intergovernmental Maritime Consultative Organization
IMF, International Monetary Fund
INS, Immigration and Naturalization Service
Insp. Gen. (also IG), inspector general
Interpol, International Criminal Police Organization
IOU, I owe you
IP, Internet Protocol
IQ, intelligence quotient
IRA, individual retirement account
IRBM, intermediate range ballistic missile
IRE, Institute of Radio Engineers
IRO, International Refugee Organization
IRS, Internal Revenue Service
ISDN, Integrated Services Digital Network
ISO, International Standards Organization
ISP, Internet service provider
ITO, International Trade Organization
ITU, International Telecommunications Union
JAG, Judge Advocate General
jato, jet-assisted takeoff
J.D. (jurum or juris doctor), doctor of laws
JOBS, Job Opportunities in the Business Sector
JIT, just in time
JPEG, Joint Photographic Experts Group
Jpn., Japan or Japanese where necessary to abbreviate
Jr., junior
Judge Adv. Gen., Judge Advocate General
LAFTA, Latin American Free Trade Association
LAN, local area network
LAPM, Link Access Procedure for Modems
lat., latitude
LC, Library of Congress
LCD, liquid crystal display
lc., lowercase
L.Ed., Lawyer's edition (U.S. Supreme Court Reports)
liq., liquid
lf., lightface
LF, low frequency
LL.B., bachelor of laws
LL.D., doctor of laws
loc. cit. (loco citato), in the place cited
log (no period), logarithm
long., longitude
loran (no periods), long-range navigation
lox (no periods), liquid oxygen
LPG, liquefied petroleum gas
Ltd., limited
Lt. Gov., lieutenant governor
M, money supply: M1, M2, etc.
M., monsieur; MM., messieurs
m. (meridies), noon
M, more
MA (see MarAd)
MAC, Military Airlift Command
MAG, Military Advisory Group
MarAd, Maritime Administration
MB, megabyte
MC, Member of Congress (emcee, master of ceremonies)
M.D., doctor of medicine
MDAP, Mutual Defense Assistance Program
MediCal, Medicaid California
memo, memorandum
MF, medium frequency; microfiche
MFN, most favored nation
MIA, missing in action (plural, MIA's)

MIME, Multipurpose Internet Mail Extensions	n.o.i.b.n., not otherwise indexed by name
MIPS, millions of instructions per second	n.o.p., not otherwise provided (for)
MIRV, multiple independently targetable reentry vehicle	n.o.s., not otherwise specified
Misc. Doc. (with number), miscellaneous document	NOVS, National Office of Vital Statistics
Mlle., mademoiselle	NPS, National Park Service
Mme., madam	NRC, Nuclear Regulatory Commission
Mmes., mesdames	NS, nuclear ship
mo., month	NSA, National Shipping Authority
MOS, military occupational specialty	NSC, National Security Council
MPEG, Motion Pictures Experts Group	NSF, National Science Foundation
M.P., Member of Parliament	n.s.k., not specified by kind
MP, military police	n.s.p.f., not specifically provided for
Mr., mister (plural, Messrs.)	NW., northwest
MRI, magnetic resonance imaging	OAPEC, Organization of Arab Petroleum Exporting Countries
Mrs., mistress	OAS, Organization of American States
Ms., coined feminine title (plural, Mses.)	OASDHL, Old-Age, Survivors, Disability, and Health Insurance Program
M.S., master of science	OASI, Old-Age and Survivors Insurance
MS., MSS., manuscript, manuscripts	OCD, Office of Civil Defense
MSC, Military Sealift Command	OCR, optical character recognition
Msr., monsignor	OD, officer of the day
m.s.l., mean sea level	OD, overdose; ODD, overdosed
MSNBC, Microsoft, National Broadcasting Co.	O.D., doctor of optometry
MTN, multilateral trade negotiations	OECD, Organization for Economic Cooperation and Development
N., north	OK, OKed, OKing, OKs
NA, not available; not applicable	OMB, Office of Management and Budget
NACo., National Association of Counties	Op. Atty. Gen., Opinions of the Attorney General
NAFTA, North American Free Trade Agreement	op. cit. (opere citato), in the work cited
NAS, National Academy of Science	OPEC, Organization of Petroleum Exporting Countries
NASA, National Aeronautics and Space Administration	OSD, Office of the Secretary of Defense
NAT, network address translation module	OTC, Organization for Trade Cooperation
NATO, North Atlantic Treaty Organization	PA, public address system
NCUA, National Credit Union Administration	Pac., Pacific Reporter; P.2d, Pacific Reporter, second series
NE., northeast	PAC, political action committee (plural, PAC's)
n.e.c., not elsewhere classified	Passed Asst. Surg., passed assistant surgeon
n.e.s., not elsewhere specified	PBS, Public Building Service
net wt., net weight	PC, personal computer
N.F., National Formulary	PCV, Peace Corps Volunteer
NFAH, National Foundation on the Arts and the Humanities	PDF, Adobe Acrobat Portable Document Format
NIH, National Institutes of Health	PDL, Page Description Language
N-ISDN, Narrowband ISDN	Pet., Peters (U.S. Supreme Court Reports)
NIST, National Institute of Standards and Technology	Ph, phenyl
n.l., natural log or logarithm	Phar.D., doctor of pharmacy
NLRB, National Labor Relations Board	Ph.B. or B.Ph., bachelor of philosophy
NNTP, Network News Transfer Protocol	Ph.D., or D.Ph., doctor of philosophy
No., Nos., number, numbers	
NOAA, National Oceanic and Atmospheric Administration	

- Ph.G., graduate in pharmacy
 PHS, Public Health Service
 PIN, personal identification number
 PING, Packet Internet Groper
 Pl., place
 p.m. (post meridiem), after noon
 P.O. Box (with number); *but* post office box (in general sense)
 POP, Point of Presence; Post Office Protocol
 POW, prisoner of war (plural, POWs)
 PPP, Point-to-Point Protocol
 PPTP, Point-to-Point Tunneling Protocol
 PTSD, post-traumatic-stress syndrome
 PERL, practical extraction and report language
 Private Res. (with number), private resolution
 Prof., professor
 pro tem (pro tempore), temporarily
 P.S. (post scriptum), postscript; public school (with number)
 PTA, parent-teachers' association
 Public Res. (with number), public resolution
 PX, post exchange
 QT, on the quiet
 racon, radar beacon
 radar, radio detection and ranging
 RAID, redundant array of inexpensive disks
 RAM, Random-Access Memory
 R&D, research and development
 rato, rocket-assisted takeoff
 Rd., road
 RDT&E, research, development, testing, and evaluation
 REA, Rural Electrification Administration
 Rev., reverend
 Rev. Stat., Revised Statutes
 RF, radiofrequency
 R.F.D., rural free delivery
 Rh, Rhesus (blood factor)
 RIF, reduction(s) in force; RIFed, RIFing, RIFs
 R.N., registered nurse
 ROTC, Reserve Officers' Training Corps
 RPC, remote procedure call
 RR., railroad
 RRB, Railroad Retirement Board
 Rt. Rev., right reverend
 RTF, Rich Text Format
 Ry., railway
 S., south; Senate bill (with number)
 SAC, Strategic Air Command
 SAE, Society of Automotive Engineers
 S&L(s), savings and loan(s)
 SALT, strategic arms limitation talks
 SAR, Sons of the American Revolution
 SBA, Small Business Administration
 sc. (scilicet), namely (see also ss)
 s.c., small caps
 S. Con. Res. (with number), Senate concurrent resolution
 s.d. (sine die), without date
 SDI, Strategic Defense Initiative
 S. Doc. (with number), Senate document
 SE., southeast
 SEATO, Southeast Asia Treaty Organization
 SEC, Securities and Exchange Commission
 sec, secant
 sech, hyperbolic secant
 2d, 3d, second, third
 SGML, Standard Generalized Markup Language
 SHF, superhigh frequency
 shoran, short range (radio)
 SI, Systeme International d'Unités
 sic, thus
 sin, sine
 sinh, hyperbolic sine
 S.J. Res. (with number), Senate joint resolution
 SLIP, Serial Line Internet Protocol
 SMTP, Simple Mail Transfer Protocol
 SNMP, Simple Network Management Protocol
 sonar (no period), sound, navigation, and ranging
 SOP, standard operating procedure
 SOS, wireless distress signal
 SP, shore patrol
 SPAR, Coast Guard Women's Reserve (semper paratus—always ready)
 sp. gr., specific gravity
 Sq., square (street)
 Sr., senior
 S. Rept. (with number), Senate report
 S. Res. (with number), Senate resolution
 SS, steamship
 ss (scilicet), namely (in law) (see also sc.)
 SSA, Social Security Administration
 SSL, Secure Sockets Layer
 SSS, Selective Service System
 St., Ste., SS., Saint, Sainte, Saints
 St., street
 Stat., Statutes at Large
 STP, standard temperature and pressure
 Sup. Ct., Supreme Court Reporter

- Supp. Rev. Stat., Supplement to the Revised Statutes
 Suplt., superintendent
 Surg., surgeon
 Surg. Gen., Surgeon General
 SW., southwest
 S.W.2d, Southwestern Reporter, second series
 SWAIS, Simple Wide Area Information System
 SWAT, special weapons and tactics (team)
 T., Tps., township, townships
 tan, tangent
 tann, hyperbolic tangent
 TB, tuberculosis
 TCP/IP, Transmission Control Protocol/Internet Protocol
 T.D., Treasury Decisions
 TDMA, Time Division Multiplexing Access
 TDY, temporary duty
 Ter., terrace
 TIFF, Tagged Image File Format
 t.m., true mean
 TNT, trinitrotoluol
 TV, television
 TVA, Tennessee Valley Authority
 2,4-D (insecticide)
 uc., uppercase
 UDP, User Datagram Protocol
 UHF, ultrahigh frequency
 UMTA, Urban Mass Transportation Administration
 U.N., United Nations
 Unesco, United Nations Educational, Scientific, and Cultural Organization (copyrighted form)
 UNICEF, United Nations Children's Fund
 URL, Uniform Resource Locator
 URN, Uniform Resource Name/Number
 U.S., U.S. Supreme Court Reports
 U.S.A., United States of America
 USA, U.S. Army
 USAF, U.S. Air Force
 USB, universal serial bus
 U.S.C., United States Code
 U.S.C.A., United States Code Annotated
 U.S.C. Supp., United States Code Supplement
 USCG, U.S. Coast Guard
 USDA, U.S. Department of Agriculture
 USES, U.S. Employment Service
 U.S. 40, U.S. No. 40, U.S. Highway No. 40
 USGS, U.S. Geological Survey
 USIA, U.S. Information Agency
 USMC, U.S. Marine Corps
 USN, U.S. Navy
 USNR, U.S. Naval Reserve
 U.S.P., United States Pharmacopeia
 USPS, U.S. Postal Service
 U.S.S., U.S. Senate; U.S. ship
 U.S.S.R., Union of Soviet Socialist Republics
 v. or vs. (versus), against
 VA, Department of Veterans Affairs
 VAT, value added tax
 VCR, video cassette recorder
 VHF, very high frequency
 VIP, very important person
 viz (videlicet), namely
 VLAN, virtual LAN
 VLF, very low frequency
 VRML, Virtual Reality Modeling Language
 VTR, video tape recording
 W., west
 WAC, Women's Army Corps; a Wac
 w.a.e., when actually employed
 WAF, Women in the Air Force; a Waf
 WAIS, Wide Area Information Server
 Wall., Wallace (U.S. Supreme Court Reports)
 WAN, wide area network
 WAVES, *women accepted for volunteer emergency service*; a Wave
 wf, wrong font
 Wheat., Wheaton (U.S. Supreme Court Reports)
 WHO, World Health Organization
 WIPO, World Intellectual Property Organization
 WMAL, WRC, etc., radio stations
 w.o.p., without pay
 WORM, write once, read many
 WWW, World Wide Web
 WYSIWYG, What you see is what you get.
 Yale L.J., Yale Law Journal
 ZIP Code, Zone Improvement Plan Code (Postal Service)
 ZIP+4, 9-digit ZIP Code
- Italic***
GPO Access
CBDNet

Standard letter symbols for units of measure

9.62. The same form is used for singular and plural senses.

A, ampere	daL, dekaliter
Å, angstrom	dam, dekameter
a, are	dam ² , square dekameter
a, atto (prefix, one-quintillionth)	dam ³ , cubic dekameter
aA, attoampere	dB, decibel
abs, absolute (temperature and gravity)	dBu, decibel unit
ac, alternating current	dc, direct current
AF, audiofrequency	dg, decigram
Ah, ampere-hour	dL, deciliter
A/m, ampere per meter	dm, decimeter
AM, amplitude modulation	dm ² , square decimeter
asb, apostilb	dm ³ , cubic decimeter
At, ampere-turn	dol, dollar
at, atmosphere, technical	doz, dozen
atm, atmosphere	dr, dram
at wt, atomic weight	dwt, deadweight tons
au, astronomical units	dwt, pennyweight
avdp, avoidupois	dyn, dyne
b, barn	EHF, extremely high frequency
B, bel	emf, electromotive force
b, bit	emu, electromagnetic unit
bbl, barrel	erg, erg
bbl/d, barrel per day	esu, electrostatic unit
Bd, baud	eV, electronvolt
bd. ft., board foot (obsolete); use fbm	°F, degree Fahrenheit
Bé, Baumé	F, farad
Bev (obsolete); see GeV	f, femto (prefix, one-quadrillionth)
Bhn, Brinell hardness number	fbm, board foot; board foot measure
bhp, brake horsepower	fc, footcandle
bm, board measure	fl, footlambert
bp, boiling point	fm, femtometer
Btu, British thermal unit	FM, frequency modulation
bu, bushel	ft, foot
c, ¢, ct; cent(s)	ft ² , square foot
c, centi (prefix, one-hundredth)	ft ³ , cubic foot
C, coulomb	ftH ₂ O, conventional foot of water
°C, degree Celsius	ft•lb, foot-pound
cal, calorie (also: cal _{IT} , International Table; cal _{th} , thermochemical)	ft•lbf, foot-pound force
cd/in ² , candela per square inch	ft/min, foot per minute
cd/m ² , candela per square meter	ft ² /min, square foot per minute
cg, centigram	ft ³ /min, cubic foot per minute
cd•h, candela-hour	ft•pdl, foot poundal
Ci, curie	ft/s, foot per second
cL, centiliter	ft ² /s, square foot per second
cm, centimeter	ft ³ /s, cubic foot per second
c/m, cycles per minute	ft/s ² , foot per second squared
cm ² , square centimeter	ft/s ³ , foot per second cubed
cm ³ , cubic centimeter	G, gauss
cmil, circular mil	G, giga (prefix, 1 billion)
cp, candlepower	g, gram; acceleration of gravity
cP, centipoise	Gal, gal cm/s ²
cSt, centistokes	gal, gallon
cwt, hundredweight	gal/min, gallons per minute
D, darcy	gal/s, gallons per second
d, day	GB, gigabyte
d, deci (prefix, one-tenth)	Gb, gilbert
d, pence	g/cm ³ , gram per cubic centimeter
da, deka (prefix, 10)	GeV, gigaelectronvolt
dag, dekagram	GHz, gigahertz (gigacycle per second)
	gr, grain; gross
	h, hecto (prefix, 100)

H, henry	lct, long calcined ton
h, hour	ldt, long dry ton
ha, hectare	LF, low frequency
HF, high frequency	lin ft, linear foot
hg, hectogram	l/m, lines per minute
hL, hectoliter	lm, lumen
hm, hectometer	lm/ft ² , lumen per square foot
hm ² , square hectometer	lm/m ² , lumen per square meter
hm ³ , cubic hectometer	lm•s, lumen second
hp, horsepower	lm/W, lumen per watt
hph, horsepower-hour	l/s, lines per second
Hz, hertz (cycles per second)	L/s, liter per second
id, inside diameter	lx, lux
ihp, indicated horsepower	M, mega (prefix, 1 million)
in, inch	M, million (3 M=3 million)
in ² , square inch	m, meter
in ³ , cubic inch	m, milli (prefix, one-thousandth)
in/h, inch per hour	M1, monetary aggregate
inH ₂ O, conventional inch of water	m ³ , cubic meter
inHg, conventional inch of mercury	m ² , square meter
in-lb, inch-pound	μ, micro (prefix, one-millionth)
in/s, inch per second	μm, micrometer
J, joule	mA, milliampere
J/K, joule per kelvin	μA, microampere
K, kayser	MB, megabyte
K, kelvin (use without degree symbol)	mbar, millibar
k, kilo (prefix, 1,000)	μbar, microbar
k, thousand (7k=7,000)	Mc, megacycle; see also MHz (megahertz), megacycles per second
kc, kilocycle; see also kHz (kilohertz), kilocycles per second	mc, millicycle; see also mHz (millihertz), millicycles per second
kcal, kilocalory	mD, millidarcy
keV, kiloelectronvolt	meq, milliequivalent
kG, kilogauss	MeV, megaelectronvolts
kg, kilogram	mF, millifarad
kgf, kilogram-force	μF, microfarad
kHz, kilohertz (kilocycles per second)	mG, milligauss
kL, kiloliter	mg, milligram
klbf, kilopound-force	μg, microgram
km, kilometer	Mgal/d, million gallons per day
km ² , square kilometer	mH, millihenry
km ³ , cubic kilometer	μH, microhenry
km/h, kilometer per hour	MHz, megahertz
kn, knot (speed)	mHz, millihertz
kΩ, kilohm	mi, mile (statute)
kt, kiloton; carat	mi ² , square mile
kV, kilovolt	mi/gal, mile(s) per gallon
kVA, kilovoltampere	mi/h, mile(s) per hour
kvar, kilovar	mil, mil
kW, kilowatt	min, minute (time)
kWh, kilowatthour	μin, microinch
L, lambert	mL, milliliter
L, liter	mm, millimeter
lb, pound	mm ² , square millimeter
lb ap, apothecary pound	mm ³ , cubic millimeter
lb, avdp, avoirdupois pound	μm ² , square micrometer
lbf, pound-force	μm ³ , cubic micrometer
lbf/ft, pound-force foot	μμ, micromicron (use of compound prefixes obsolete; use pm, picometer)
lbf/ft ² , pound-force per square foot	μμf, micromicrofarad (use of compound prefixes obsolete; use pF)
lbf/ft ³ , pound-force per cubic foot	mmHg, conventional millimeter of mercury
lbf/in ² , pound-force per square inch (see psi)	
lb/ft, pound per foot	
lb/ft ² , pound per square foot	
lb/ft ³ , pound per cubic foot	

M Ω , megohm	$^{\circ}$ R, roentgen
mo, month	R, degree rankine
mol, mole (unit of substance)	R, degree reamur
mol wt, molecular weight	rad, radian
mp, melting point	rd, rad
ms, millisecond	rem, roentgen equivalent man
μ s, microsecond	r/min, revolutions per minute
Mt, megaton	rms, root mean square
mV, millivolt	r/s, revolutions per second
μ V, microvolt	s, second (time)
MW, megawatt	s, shilling
mW, milliwatt	S, siemens
μ W, microwatt	sb, stilb
MWd/t, megawatt-days per ton	scp, spherical candlepower
Mx, maxwell	s•ft, second-foot
n, nano (prefix, one-billionth)	shp, shaft horsepower
N, newton	slug, slug
nA, nanoampere	sr, steradian
nF, nanofarad	sSf, standard saybolt fural
N•m, newton meter	sSu, standard saybolt universal
N/m ² , newton per square meter	stdft ³ , standard cubic foot (feet)
nmi, nautical mile	Sus, saybolt universal second(s)
Np, neper	T, tera (prefix, 1 trillion)
ns, nanosecond	Tft ³ , trillion cubic feet
N•s/m ² , newton second per square meter	T, tesla
nt, nit	t, tonne (metric ton)
od, outside diameter	tbsp, tablespoonful
Oe, oersted (use of A/m, amperes per meter, preferred)	thm, therm
oz, ounce (avoirdupois)	ton, ton
p, pico (prefix, one-trillionth)	tsp, teaspoonful
P, poise	Twad, twaddell
Pa, pascal	u, (unified) atomic mass unit
pA, picoampere	UHF, ultrahigh frequency
pct, percent	V, volt
pdl, poundal	VA, voltampere
pF, picofarad (micromicrofarad, obsolete)	var, var
pF, water-holding energy	VHF, very high frequency
pH, hydrogen-ion concentration	V/m, volt per meter
ph, phot; phase	W, watt
pk, peck,	Wb, weber
p/m, parts per million	Wh, watthour
ps, picosecond	W/(m•K), watt per meter kelvin
psi, pounds per square inch	W/sr, watt per steradian
pt, pint	W/(sr•m ²), watt per steradian square meter
pW, picowatt	x, unknown quantity (italic)
qt, quart	yd, yard
quad, quadrillion (10 ¹⁵)	yd ² , square yard
$^{\circ}$ R, rankine	yd ³ , cubic yard
	yr, year

Standard Latin abbreviations

9.63. When Latin abbreviations are used, follow this list.

- a., annus, year; ante, before
 A.A.C., anno ante Christum, in the year before Christ
 A.A.S., Academiae Americanae Socius, Fellow of the American Academy [Academy of Arts and Sciences]
 A.B., artium baccalaureus, bachelor of arts
 ab init., ab initio, from the beginning
 abs. re., absente reo, the defendant being absent
 A.C., ante Christum, before Christ
 A.D., anno Domini, in the year of our Lord
 a.d., ante diem, before the day
 ad fin., ad finem, at the end, to one end
 ad h.l., ad hunc locum, to this place, on this passage
 ad inf., ad infinitum, to infinity
 ad init., ad initium, at the beginning
 ad int., ad interim, in the meantime
 ad lib., ad libitum, at pleasure
 ad loc., ad locum, at the place
 ad val., ad valorem, according to value
 A.I., anno inventionis, in the year of the discovery
 al., alia, alii, other things, other persons
 A.M., anno mundi, in the year of the world; Annus mirabilis, the wonderful year [1666]; a.m., ante meridiem, before noon
 an., anno, in the year; ante, before
 ann., annales, annals; anni, years
 A.R.S.S., Antiquariorum Regiae Societatis Socius, Fellow of the Royal Society of Antiquaries
 A.U.C., anno urbis conditae, ab urbe conlita, in [the year from] the building of the City [Rome], 753 B.C.
 B.A., baccalaureus artium, bachelor of arts
 B. Sc., baccalaureus scientiae, bachelor of science
 C., centum, a hundred; condemno, I condemn, find guilty
 c., circa, about
 cent., centum, a hundred
 cf., confer, compare
 C.M., chirurgiae magister, master of surgery
 coch., cochlear, a spoon, spoonful
 coch. amp., cochlear amplum, a tablespoonful
 coch. mag., cochlear magnum, a large spoonful
 coch. med., cochlear medium, a dessert spoonful
 coch. parv., cochlear parvum, a teaspoonful
 con., contra, against; conjunx, wife
 C.P.S., custos privati sigilli, keeper of the privy seal
 C.S., custos sigilli, keeper of the seal
 cwt., c. for centum, wt. for weight, hundredweight
 D., Deus, God; Dominus, Lord; d., decretum, a decree; denarius, a penny; da, give
 D.D., divinitatis doctor, doctor of divinity
 D.G., Dei gratia, by the grace of God; Deo gratias, thanks to God
 D.N., Dominus noster, our Lord
 D. Sc., doctor scientiae, doctor of science
 d.s.p., decessit sine prole, died without issue
 D.V., Deo volente, God willing
 dwt., d. for denarius, wt. for weight pennyweight
 e.g., exempli gratia, for example
 et al., et alibi, and elsewhere; et alii, or aliae, and others
 etc., et cetera, and others, and so forth
 et seq., et sequentes, and those that follow
 et ux., et uxor, and wife
 F., filius, son
 f., fiat, let it be made; forte, strong
 fac., factum similis, facsimile, an exact copy
 fasc., fasciculus, a bundle
 fl., flores, flowers; floruit, flourished; fluidus, fluid
 f.r., folio recto, right-hand page
 F.R.S., Fraternalitatis Regiae Socius, Fellow of the Royal Society
 f.v., folio verso, on the back of the leaf
 guttat., guttatim, by drops
 H., hora, hour
 h.a., hoc anno, in this year; hujus anni, this year's
 hab. corp., habere corpus, have the body—a writ
 h.e., hic est, this is; hoc est, that is
 h.m., hoc mense, in this month; huius mensis, this month's
 h.q., hoc quaere, look for this
 H.R.I.P., hic requiescat in pace, here rests in peace
 H.S., hic sepultus, here is buried; hic situs, here lies; h.s., hoc sensu, in this sense

- H.S.S., *Historiae Societatis Socius*, Fellow of the Historical Society
 h.t., *hoc tempore*, at this time; *hoc titulo*, in or under this title
 I, *Idus*, the Ides; *i.*, *id*, that; *immortalis*, immortal
 ib. or *ibid.*, *ibidem*, in the same place
 id., *idem*, the same
 i.e., *id est*, that is
 imp., *imprimatur*, sanction, let it be printed
 I.N.D., *in nomine Dei*, in the name of God
 in f., in fine, at the end
 inf., *infra*, below
 init., *initio*, in the beginning
 in lim., in *limine*, on the threshold, at the outset
 in loc., in *loco*, in its place
 in loc. cit., in *loco citato*, in the place cited
 in pr., in *principio*, in the beginning
 in trans., in *transitu*, on the way
 i.q., *idem quod*, the same as
 i.q.e.d., *id quod erat demonstrandum*, what was to be proved
 J., *judex*, judge
 J.C.D., *juris civilis doctor*, doctor of civil law
 J.D., *jurum or juris doctor*, doctor of laws
 J.U.D., *juris utriusque doctor*, doctor of both civil and canon law
 L., *liber*, a book; *locus*, a place
 £, *libra*, pound; placed before figures, thus £10; if l., to be placed after, as 401.
 L.A.M., *liberalium artium magister*, master of the liberal arts
 L.B., *baccalaureus literarum*, bachelor of letters
 lb., *libra*, pound (singular and plural)
 L.H.D., *literarum humaniorum doctor*, doctor of the more humane letters
 Litt. D., *literarum doctor*, doctor of letters
 LL.B., *legum baccalaureus*, bachelor of laws
 LL.D., *legum doctor*, doctor of laws
 LL.M., *legum magister*, master of laws
 loc. cit., *loco citato*, in the place cited
 loq., *loquitur*, he, or she, speaks
 L.S., *locus sigilli*, the place of the seal
 l.s.c., *loco supra citato*, in the place above cited
 £ s. d., *librae, solidi, denarii*, pounds, shillings, pence
 M., *magister*, master; *manipulus*, handful; *medicinae*, of medicine; *m.*, *meridies*, noon
 M.A., *magister artium*, master of arts
 M.B., *medicinae baccalaureus*, bachelor of medicine
 M. Ch., *magister chirurgiae*, master of surgery
 M.D., *medicinae doctor*, doctor of medicine
 m.m., *mutatis mutandis*, with the necessary changes
 m.n., *mutato nomine*, the name being changed
 MS., *manuscriptum*, manuscript; MSS., *manuscripta*, manuscripts
 Mus. B., *musicae baccalaureus*, bachelor of music
 Mus. D., *musicae doctor*, doctor of music
 Mus. M., *musicae magister*, master of music
 N., *Nepos*, grandson; *nomen*, name; *nomina*, names; *nostr*, our; *n.*, *natus*, born; *nocte*, at night
 N.B., *nota bene*, mark well
 ni. pri., *nisi prius*, unless before
 nob., *nobis*, for (or on) our part
 nol. pros., *nolle prosequi*, will not prosecute
 non cul., *non culpabilis*, not guilty
 n.l., *non licet*, it is not permitted; *non liquet*, it is not clear; *non longe*, not far
 non obs., *non obstante*, notwithstanding
 non pros., *non prosequitur*, he does not prosecute
 non seq., *non sequitur*, it does not follow logically
 O., *octarius*, a pint
 ob., *obiit*, he, or she, died; *obiter*, incidentally
 ob. s.p., *obiit sine prole*, died without issue
 o.c., *opere citato*, in the work cited
 op., *opus*, work; *opera*, works
 op. cit., *opere citato*, in the work cited
 P., *papa*, pope; *pater*, father; *pontifex*, bishop; *populus*, people; *p.*, *partim*, in part; *per*, by, for; *pius*, holy; *pondere*, by weight; *post*, after; *primus*, first; *pro*, for
 p.a., or *per ann.*, per annum, yearly; *pro anno*, for the year
 p. ae., *partes aequales*, equal parts
 pass., *passim*, everywhere
 percent., *per centum*, by the hundred
 pil., *pilula*, pill
 Ph. B., *philosophiae baccalaureus*, bachelor of philosophy
 P.M., *post mortem*, after death

- p.m., post meridiem, afternoon
 pro tem., pro tempore, for the time being
 prox., proximo, in or of the next [month]
 P.S., postscriptum, postscript;
 P.SS., postscripta, postscripts
 q.d., quasi dicat, as if one should say; quasi dictum, as if said; quasi dixisset, as if he had said
 q.e., quod est, which is
 Q.E.D., quod erat demonstrandum, which was to be demonstrated
 Q.E.F., quod erat faciendum, which was to be done
 Q.E.I., quod erat inveniendum, which was to be found out
 q.l., quantum libet, as much as you please
 q. pl., quantum placet, as much as seems good
 q.s., quantum sufficit sufficient quantity
 q.v., quantum vis, as much as you will; quem, quam, quod vide, which see; qq. v., quos, quas, or quae vide, which see (plural)
 R., regina, queen; recto, right-hand page; respública, commonwealth
 R̄, recipe, take
 R.I.P., requiescat, or requiescant, in pace, may he, she, or they, rest in peace
 R.P.D., rerum politicarum doctor, doctor of political science
 rr., rarissime, very rarely
 R.S.S., Regiae Societatis Sodalis, Fellow of the Royal Society
 S., sepultus, buried; situs, lies; societas, society; socius or sodalis, fellow; s., semi, half; solidus, shilling
 s.a., sine anno, without date; secundum artem, according to art
 S.A.S., Societatis Antiquariorum Socius, Fellow of the Society of Antiquaries
 sc., scilicet, namely; sculpsit, he, or she, carved or engraved it
 Sc. B., scientiae baccalaureus, bachelor of science
 Sc. D., scientiae doctor, doctor of science
 S.D., salutem dicit, sends greetings
 s.d., sine die, indefinitely
 sec., secundum, according to
 sec. leg., secundum legem, according to law
 sec. nat., secundum naturam, according to nature, or naturally
 sec. reg., secundum regulam, according to rule
 seq., sequens, sequentes, sequentia, the following
 S.H.S., Societatis Historiae Socius, Fellow of the Historical Society
 s.h.v., sub hac voce or sub hoc verbo, under this word
 s.l.a.n., sine loco, anno, vel nomine, without place, date, or name
 s.l.p., sine legitima prole, without lawful issue
 s.m.p., sine mascula prole, without male issue
 s.n., sine nomine, without name
 s.p., sine prole, without issue
 S.P.A.S., Societatis Philosophiae Americanae Socius, Fellow of the American Philosophical Society
 s.p.s., sine prole superstite, without surviving issue
 S.R.S., Societatis Regiae Socius or Sodalis, Fellow of the Royal Society
 ss, scilicet, namely (in law)
 S.S.C., Societas Sanctae Crucis, Society of the Holy Cross
 stat., statim, immediately
 S.T.B., sacrae theologiae baccalaureus, bachelor of sacred theology
 S.T.D., sacrae theologiae doctor, doctor of sacred theology
 S.T.P., sacrae theologiae professor, professor of sacred theology
 sub., subaudi, understand, supply
 sup., supra, above
 t. or temp., tempore, in the time of
 tal. qual., talis qualis, just as they come; average quality
 U.J.D., utriusque juris doctor, doctor of both civil and canon law
 ult., ultimo, last month (may be abbreviated in writing but should be spelled out in printing)
 ung., unguentum, ointment
 u.s., ubi supra, in the place above mentioned
 ut dict., ut dictum, as directed
 ut sup., ut supra, as above
 ux., uxor, wife
 v., versus, against; vide, see; voce, voice, word
 v. — a., vixit — annos, lived [so many] years
 verb. sap., verbum [satis] sapienti, a word to the wise suffices
 v.g., verbi gratia, for example
 viz, videlicet, namely
 v.s., vide supra, see above