## Appendix A: Linotype-Hell

Technical Acronyms and Information Contractions

| А | AA Auth    | or's Alteration  |
|---|------------|--|
|   | AC Alter   | nating Current   |
|   |            | anced Computing Environment (s/w and h/w environment initiative)         |
|   |            | omatic Color Removal (European preferred term for GCR)                   |
|   | A/D Anal   | · · · · · · · · · · · · · · · · · · ·                                    |
|   |            | e Desktop Bus (Macintosh bus for input, i.e., keyboards, mice, etc.)     |
|   |            | og to Digital Conversion   |
|   |            | matic Data Processing  |
|   | AFM Adol   |  |
|   |            | eTalk Filing Protocol (network file system from Apple)                   |
|   |            | enGesellschaft (German word for corporation)                             |
|   | Al Artifi  |  |
|   |            | rican Institute for the Graphic Arts                                     |
|   |            | ociation of Imaging Service Bureaus                                      |
|   |            |  |
|   | ALU Arith  |  |
|   | AMAmp      |  |
|   |            | rican Newspaper Publishers Association (now called NAA)                  |
|   |            | rican National Standards Institute                                       |
|   | AP Artis   |  |
|   |            | ciated Press (wire service)  |
|   |            | s Printer Description file   |
|   |            | e Programmers and Developers Association                                 |
|   |            | ications Programming Interface   |
|   |            | matic Page Positioning   |
|   |            | matic Picture Replacement  |
|   |            | ptable Quality Level   |
|   |            | rican Standards Association (former name of ANSI, also refers to a filr  |
|   |            | d standard developed by ASA)   |
|   |            | rican Standard Code for Information Interchange (standard text format    |
|   |            | ication Specific Integrated Circuit                                      |
|   |            | etalk Session Protocol   |
|   |            | nced Technology, as in, PC-AT  |
|   | ATM Adol   |  |
|   | ATX Adol   | be Technology eXchange (Adobe-sponsored PostScript user groups)          |
|   | ATypl Asso | ciation Typographic International  |
|   | A/UX Appl  | e/UniX   |
|   |            |  |
| В | B Byte     |  |
|   |            | nners All-purpose Symbolic Instruction Code (computer language)          |
|   | BCD Bina   |  |
|   | BDR Basi   | Density Range  |
|   | BIOS Basi  | c Input Output System (part of personal computer operating system)       |
|   | Bit Blna   | ry digiT   |
|   |            | ry Large OBject (multi-media data type)                                  |
|   |            | bitmapped (PC file format)   |
|   |            | eley Macintosh Users Group   |
|   |            | onet-Neill-Concelman, or. British National Connector (for coaxial cables |

BPS..... Bits Per Second BTU..... British Thermal Unit B&W ..... Black and White C . . . . . . . Centigrade CAD/CAM . . Computer Assisted (or Aided) Design/Computer Assisted Manufacturing CAI . . . . . . Computer Assisted (or Aided) Instruction CALS..... Computer-aided Acquisition and Logistic Support (Department of Defense ..... initiative on electronically submitted documents) CBP. . . . . . Computer Based Publishing CBT..... Computer Based Training CC..... ChromaCom (Linotype-Hell color page assembly workstation) CC..... Color Correcting CCD ..... Charge-Coupled Device CCI . . . . . . Center for Creative Imaging CCITT . . . . . Consultative Committee for International Telephony and Telegraphy . . . . . . . . (communications standards committee of ITU) CCR ..... Complementary Color Reduction (early Hell term for GCR) CCTV ..... Closed Circuit TeleVision CD..... Compact Disk CD-I.... Compact Disk Interactive CDR ..... Copy Density Range CD-ROM . . . Compact Disk - Read Only Memory CEPS . . . . Color Electronic Prepress System CGA . . . . . Color Graphics Adapter (video display standard) CGATS . . . . Committee for Graphic Arts Technology Standards (ANSI committee) CGI . . . . . . Computer Graphics Interface (standard format for writing graphics drivers) CGM . . . . . Computer Graphics Metafile (file format) CIC . . . . . . Common Impression Cylinder CIE ...... Commission International de l'Eclairage (color standards organization) CIELAB . . . . CIE color standard where L stands for Lightness or Luminance, and A and B . . . . . . . . are mathematically defined coordinates (see LAB) CIELCH.... CIE color standard where L stands for Lightness or Luminance, C stands for ..... Chroma, and H stands for Hue angle (see LCH) CIELUV.... CIE color standard where L stands for Lightness or Luminance, and U and V ..... are mathematically defined coordinates (see LUV) CIEXYZ.... CIE color standard where X, Y, and Z are mathematically defined coordinates CISC . . . . . Complex Instruction Set Computer C&lc . . . . . Capitals and lower case CLC..... Color Laser Copier CLUT..... Color Look-Up Table CMC . . . . . Colour Measurement Committee (color tolerancing method) CMMU.... Cache Memory Management Unit CMOS . . . . . Complementary Metal Oxide Semiconductor (semiconductor type) CMS . . . . . Color Management System CMYK . . . . . Cyan, Magenta, Yellow and Black (ink colors for printing) COBOL . . . . COmmon Business Oriented Language (computer language) CORA . . . . Computer Orientated Reproducer Assembly (Linotype-Hell proprietary type-..... setting language, also, the name of the principle programmer's wife) CP..... Chromagraph Poster (Linotype-Hell digital color laser scanner) CPSI . . . . . Configurable PostScript Interpreter CPU ..... Central Processing Unit CR..... Carriage Return CQR . . . . . Color Quality Registration (trademark of the Ultre division of Linotype-Hell) CRC . . . . . Camera Ready Copy CRC ..... Cyclic Redundancy Check (error checking technique) CREF . . . . . Computer Ready Electronic Files

CRI . . . . . . Color Rendering Index

CRT.... Cathode Ray Tube C&sc..... Capitals and SMALL CAPITALS CSMA . . . . Carrier Sense Multiple Access (LAN access technique) CSMA/CD . . Carrier Sense Multiple Access with Collision Detection CSR ..... Customer Service Representative CT..... Continuous Tone CTU..... Color Transformation Unit CT2T..... Continuous Tone To Tape DA..... Desk Accessory D/A . . . . . Digital to Analog DAC ..... Digital to Analog Conversion DAT.... Digital Audio Tape DC..... Direct Current DC..... Digital Chromagraph (Linotype-Hell digital color laser scanner) DCS ..... Desktop Color Separation DCT..... Discrete Cosine Transform (encoding and decoding technique) DCX ..... (scanned image format) DDAP . . . . . Digital Distribution of Advertising for Print DDCP . . . . Direct-Digital Color Proof DDE ..... Dynamic Data Exchange DDES . . . . . Digital Data Exchange Standards DDP ..... Digital Delivery Protocol (ask Don) DEC ..... Digital Equipment Corporation DENSY . . . . Direct ENtry SYstem (Linotype-Hell proprietary typesetting language) DG..... Data General DIC . . . . . . Device Independent Color DIN . . . . . . Deutsche Industrie Norm (German industrial standards organization) DMA . . . . . Direct Memory Access (standard memory access procedure) DMAX . . . . . Maximum Density DMIN..... Minimum Density DOS . . . . . Disk Operating System DP..... Data Processing DPCM . . . . Differential Pulse Code Modulation DPI . . . . . . Dots Per Inch DRAM . . . . . Dynamic Random Access Memory DRUPA . . . . DRUck und PApier (German conference, short for printing and paper) DSP..... Digital Signal Processor (specialized computer chip) DTP..... DeskTop Publishing DUC ..... Disk Unit Controller DXF..... (2-d graphics CAD format) EAROM.... Electrically Alterable Read-Only Memory EB . . . . . Electron Beam EBCDIC ... Extended Binary Coded Decimal Interchange Code ECL.... Emitter-Coupled Logic (type of ALU technology) EDA.... Effective Dot Area EDG ..... Electronic Dot Generator (or Generation) EDI ..... Electronic Data Interchange EDP..... Electronic Data Processing EEPROM . . Electrically Erasable Programmable Read-Only Memory (see EPROM) EFEX..... Electronic Front-End Exchange (GCA specification) EFI ..... Electronics For Imaging EGA ..... Enhanced Graphics Adapter (video display standard) EIEIO . . . . . Enforce In-order Execution of Input/Output (PowerPC chip instruction) EIP ..... Electronically Integrated Processing EISA . . . . . Extended Industry Standard Architecture (PC bus standard) EMS . . . . . Electronic Mechanical Specification (GCA specification)

END ..... Equivalent Neutral Density EOL.... End Of Line EP . . . . . . Electronic Publishing EPC..... Electronic Page Composition EPROM.... Erasable Programmable Read-Only Memory (see EEPROM) EPA..... Environmental Protection Agency EPS..... Electronic Publishing System EPS..... Encapsulated PostScript EPS5..... (PostScript color separation method) EPSF..... Encapsulated PostScript File ESDI . . . . . Enhanced Small Device Interface (hardware standard for connecting disk . . . . . . . . and tape drives to computers) ETAOIN.... Sequence of kevs on left hand side of a hot metal Linotype keyboard ..... (ETAOINSHRDLU sometimes mistakenly appears in documents set via hot ..... metal because that sequence of letters was used as a test by operators.) EuroSWOP . European Specification for Web Offset Publications F . . . . . . . Fahrenheit f-stop . . . . . fixed stop FDDI . . . . . Fiber Distributed Data Interface (ANSI Standard for fiber optic LANs) FDM ..... Frequency Division Multiplexing FESPA . . . . Federation of European Screen Printing Associations FFTA..... Foundation of Flexographic Technical Association (educational arm of FTA) F&G..... Folded and Gathered (unbound book) FIFO . . . . . First In, First Out FIPP . . . . . International Federation of the Periodical Press FLOPS . . . . FLOating point operations Per Second FM.... Frequency Modulation FOND . . . . FONt family Descriptor FORTRAN. . FORmula TRANslator FPO. . . . . . For Position Only FPU.... Floating Point Unit FTA . . . . . Flexographic Technical Association FTP . . . . . . File Transfer Protocol G . . . . . . . . Gram G..... Giga (1,000,000,000 units) GA..... Graphic Arts GAA ..... Gravure Association of America GAMIS . . . . Graphic Arts Marketing Information Service GATF . . . . . Graphic Arts Technical Foundation GB..... Gigabyte GCA . . . . . Graphic Communications Association GCR . . . . . Gray Component Replacement (although most vendors now use the term ..... GCR, a variety of terms have been used to describe GCR, including: ACR, ..... CCR, ICR, PCR, and PIR) GCR . . . . . Group Coded Recording (disk format standard) GEM . . . . . . Graphics Environment Manager (user interface and vector graphic file format) GIF . . . . . . Graphic Interchange Format (CompuServe graphic file format) GHz..... GigaHertz (1 billion cycles per second) GIGO..... Garbage In, Garbage Out GMBH..... Gesellschaft Mit Beschränkter Haftung (German for a limited business) GPIB . . . . . General Purpose Interface Board (or Bus) GUI . . . . . . Graphical User Interface GWE . . . . . Graphical Windowing Environments H . . . . . Height HADA . . . . . High Availability Disk Array

HCL..... Hue, Chroma and Lightness (or Luminance)

|   | HDLC High-level Data Link Control (ISO Protocol) HDTV High Definition TeleVision HeNe Helium Neon (graphic arts laser) HGC Hercules Graphic Card (video display standard) H&J Hyphenation and Justification HP Hewlett Packard HPGL Hewlett Packard Graphics Language (also a file format) HQS High Quality Screening (HQS Screening is a Linotype-Hell registered trademark) HSB Hue, Saturation and Brightness (color model) HSI Hue, Saturation and Intensity (color model) HSL |
|---|--|
|   | IBM International Business Machines IC Integrated Circuit ICR Integrated Color Removal (Dainippon Screen, GCR) ICS Includer Color Separation (Linotype-Hell color separation standard) IDN Integrated Digital Network IEEE Institute of Electrical and Electronic Engineers IFEN Inter-company File Exchange Network (proposed standard by major repro   |
| J | JIT Just In Time  JBIG Joint BI-level Group (CCITT/ISO committee on facsimile compression)  JND Just Noticeable Difference (in color perception)  JPEG Joint Photographic Experts Group (CCITT/ISO committee which has  proposed a standard for color image compression)   |
| K | K Kelvin K Kilo (K or k by itself may mean either 1024 or 1000 units) KB Kilobyte KBD Kilobaud KBPS Kilobits per second KG Kilogram KHz KiloHertz (frequency unit equal to one thousand cycles per second) KISS Keep It Simple, Stupid   |
| L | L Length L Linotronic L Liter  |

|   | LANLASER  IcLCD  LCHLDN  LEDL+HUG  LIFO  LIFO  LIPD  LPI  LPM  LQP  LTC  LUT  LUT  LUV  LVT  LW  LW | Liquid Crystal Display (screen display technology) Lightness (or Luminance), Chroma, and Hue angle Long Distance Network Light Emitting Diode Linotype-Hell User Group Last In, First Out Linotype Image Rasterizing Accelerator Linotype Interfaces Letraset Printer Description Lines Per Inch Lines Per Minute (measure of typesetter speed) Letter Quality Printer Linotronic Look-Up Table Lightness (or Luminance) and two color coordinates: U which represents values on a red/green axis and V which represents values on a blue/yellow axis. Also written as Lu'v' or L*u*v*. Light Valve Technology Laser Writer   |
|---|---|---|
| M | M   | (as M weight, this refers to the weight of 1000 sheets of paper) Mega (1,000,000 units) Multi-Access Unit Megabyte Megabits per second Micro Channel Architecture (internal bus for IBM PS/2) Monochrome Display Adapter (video display standard) Million FLOating point instructions Per Second Modified Frequency Modulation (disk format standard) Monochrome Graphic Adapter (video display standard) Monochrome Graphic Adapter (video display standard) MegaHertz (frequency unit equal to one million cycles per second) Magnetic Ink Character Recognition Musical Instrument Digital Interface Million Instructions Per Second (sometimes jokingly referred to as Meaningless Indicator of Performance Specification) Management Information System Magneto Optical (disk descriptor) MOdulator/DEModulator Metal Oxide Semiconductor (electronic chip) Magazine Publishers Association Motion Picture Experts Group (CCITT/ISO committee working on compression of full-motion video images) Millisecond (1/1,000th of a second) Microsecond (1/1,000,000th of a second) MicroSoft Disk Operating System Material Data Safety Sheet (data sheet that comes with chemical products) Mean Time Between Failure Modulation Transfer Function |

N NAA. . . . . . Newspaper Association of America (formerly called ANPA)

NADTP . . . . National Association of DeskTop Publishers NAPL..... National Association of Printers and Lithographers NAQP . . . . . National Association of Quick Printers NBP..... Name Binding Protocol NBS..... National Bureau of Standards (now called NIST) NCP ..... Network Control Program ND..... Neutral Density NDCA . . . . National Desktop Color Alliance (now part of TIA) NFNT . . . . . New FoNT numbering system NFS..... Network File System (distributed file system from Sun) NIST . . . . . National Institute of Standards and Technology (formerly called NBS) NM . . . . . . Nanometer (1/1,000,000,000th of a meter, used as a measure of wavelength) NNA ..... National Newspaper Association NOS . . . . . Network Operating System NPES . . . . . National Printing Equipment and Supplies Association, however, though they ..... still maintain the NPES acronym, they are now referred to as the Association ..... for Suppliers of Printing and Publishing Technologies NS..... Nanosecond (1/1,000,000,000th of a second) NTSC . . . . . National Television Systems Committee (US Color TV standard, often ..... jokingly referred to as Never Twice the Same Color) NVRAM.... Non-Volatile Random Access Memory NuBus . . . . (32-bit bus architecture for Macintosh II computers) NYPPUG... New York Professional PostScript Users Group OCE . . . . . Open Collaboration Environment OCR ..... Optical Character Recognition ODA ..... Office Document Architecture ODA ..... Optical Dot Area OEM . . . . . Original Equipment Manufacturer OLE..... Object Linking and Engineering OLE..... Object Linking Environment OLP..... On-Line Processor OPI . . . . . . Open Prepress Interface OS..... Operating System OSHA . . . . Occupational Safety and Health Administration OSF..... Open Software Foundation OSI . . . . . . Open System Interconnection (ISO standard communications protocol) OTJ . . . . . On The Job (as in OTJ training) PABX . . . . . Private Automatic Branch eXchange (telephone network exchange) PAL . . . . . Phase Alternating Line system (European color TV standard) PAL . . . . . Programmable Array Logic (customizable chip, also known as a gate array) PAP..... Printer Access Protocol PARC . . . . . Palo Alto Research Center (Xerox Corporation R&D facility) PC..... Personal Computer PC . . . . . . Print Contrast PC.... Printed Circuit PC-DOS . . . Personal Computer - Disk Operating System PCB. . . . . . Printed Circuit Board PCM . . . . . Pulse Code Modulation PCR ..... Programmed Color Reduction (early Hell term for GCR) PCR ..... Polychromatic Color Removal (early Crosfield term for GCR) PCX. . . . . . (raster graphics format for PC Paintbrush) PDF..... Printer Description File (for QuarkXPress) PDL..... Page Description Language PDS..... Processor Direct Slot PDX..... Printer Description eXtension PE . . . . . . Printer's Error

PERT . . . . . Program Evaluation and Review Technique (charting technique) PGA . . . . . Professional Graphics Adapter (video display standard) pH . . . . . . Potential of Hydrogen (measure of acidity/alkalinity) PHIGS..... Programmers Hierarchical Interactive Graphics Standard (language for ..... creating 2-D and 3-D graphic images) PhotoYCC.. (color space used for Kodak's Photo CD, see YCC) PIA . . . . . Printing Industries of America PIC . . . . . . (Lotus file format) PICT . . . . . As in picture (Macintosh file format) PIF ..... Printer Information File (Windows) PIL..... Program Interchange Language PIM . . . . . . Page Imaging Model PIR . . . . . . Programmed Ink Reduction (early Royal Zenith term for GCR) PIRA . . . . . Printing Industry Research Association Pixel . . . . . contraction of Picture Element or Picture Cell PM..... Preventative Maintenance PMMU.... Paged Memory Management Unit PMS . . . . . Pantone Matching System PMT . . . . . PhotoMechanical Transfer (photostat, Kodak trademark) PMT ..... PhotoMultiplier Tube PNTG .... Paint file format PPA.... Professional Prepress Alliance PPC.... Print Process Calibration PPD..... PostScript Printer Description (includes APDs and PDXs) PPI ..... Pixels Per Inch PROM . . . . Programmable Read-Only Memory PS . . . . . . Picosecond (1/1,000,000,000,000th of a second) PS..... PostScript PSE.... Paper Surface Efficiency PTS..... PhotoTypeSetting PVC..... PolyVinyl Chloride Q QA..... Quality Assurance QC..... Quality Control QIP . . . . . . Quality Improvement Process QUI . . . . . . . QuarkXPress Users International (users group) QWERTY . . Sequence of keys on the top letter row of a standard keyboard R . . . . . . . . Recorder (i.e., R3030) RAID . . . . . Redundant Array of Inexpensive Disks RAM . . . . . Random Access Memory RC..... Resin-Coated (photographic paper) RCA ..... Radio Corporation of America R&D ..... Research and Development RFP..... Request For Proposal RFQ ..... Request For Quote RGB . . . . . Red, Green and Blue (color space describing mixing of light) RH.... Relative Humidity RIFF ..... Raster Image File Format RIP . . . . . Raster Image Processor RISC . . . . . Reduced Instruction Set Computer RIT ..... Rochester Institute of Technology RJE . . . . . . Remote Job Entry RLC..... Run Length Coding (line work format) RLE...... Run Length Encoding (compression technique and line work format) RLL . . . . . . Run Length Limited (method for encoding data) RLP..... Rotary Letter Press ROI . . . . . . Return On Investment

ROM . . . . . Read-Only Memory

|   | RR Ragged Right RR Right Reading RRED Right Reading Emulsion Down RREU Right Reading Emulsion Up RS-232 (EIA specified serial interface, RS may stand for registered specification or received signal) RT Rational Tangent (RT Screening is a Linotype-Hell registered trademark) RTF Rich Text Format  |
|---|---|
| S | S Scanner (i.e., S3500) S-Bus (bus for Sun Computers) SCID Standard Color Image Data SCODL Scanned Conversion Object Description Language (also a PC file format for film recorders) SCSI Small Computer System Interface (interface standard) SDLC Synchronous Data Link Control (networking protocol) SECAM SEquential Couleur A'Memorie (French and Russian Color TV Standard) SGML Standard Generalized Markup Language SHF Super High Frequency SID Solid Ink Density SIG Special Interest Group SIGGRAPH Special Interest Group for computer GRAPHics SIMM Single In-Line Memory Module SLUT Scanner Look-Up Table SMP Symmetric Multi-Processor SMPTE Society of Motion Picture and Television Engineers SNA System Network Architecture SNAP Specification for Non-heat Advertising Printing SNR Signal to Noise Ratio SOL Start Of Line SPAI Screen Printing Association International SPARC Scalable Processor ARChitecture (32-bit RISC computer) SPC Statistical Process Control SQL Structured Query Language SQUID Superconducting QUantum Interface Device SW Software SWOP (revised) Specifications for Web Offset Publications SYLK SYmbolic Link file (spreadsheet file format) |
| Т | T Tera (1,000,000,000,000 units) TAC Total Area Coverage (ink coverage) TAGA Technical Association of the Graphic Arts TAPPI Technical Association of the Pulp and Paper Industry TARGA Truevision Advanced Raster Graphics Adapter (video graphics standard) TAXI Transparent Asynchronous Xmitter receiverInterface TB Terabyte TCP/IP Transmission Control Protocol/Internet Protocol (network protocol) TDM Time Division Multiplexing TFTP Trivial File Transfer Protocol (TCP/IP protocol for file transfer) TGA TARGA (file format) TIA Typographers International Association TIFF Tagged Image File Format (raster image file format) TLA Three Letter Acronym TOPS Transparent OPerating System (for LANs) TQM Total Quality Management TRAND Tone Reproduction And Neutral Density System (chart developed by RIT) TTS TeleTypesetter System   |
| U | UCA Under Color Addition  |

UCL..... Universal Color Language UCR ..... Under Color Removal UCS ..... Uniform Chromaticity Scale UDK ..... User Defined Key UHF..... Ultra-High Frequency UI .... User Interface UL . . . . . . . Underwriters Laboratories (independent testing laboratory) U&lc . . . . . Upper and lower case UNIX . . . . . (multi-tasking operating system developed by Bell Labs, the term is a .... play-on-words of an early system called Multics) UPC ..... Universal Product Code UPS..... Uninterruptible Power Source USM .... UnSharp Masking UV . . . . . . . Ultra Violet VAC..... Volts, Alternating Current VAR..... Value Added Reseller VAX..... Virtual Address eXtension (family of 32 bit computers from DEC) VDT..... Video Display Terminal VDU ..... Video Display Unit VGA ..... Video Graphics Array (video display standard) VHF.... Very High Frequency VLIW . . . . . Very Large Instruction Word VLSI . . . . . Very Large Scale Integration VM..... Virtual Memory VME ..... Versa Module Europa (IEEE bus standard) VRAM . . . . Video Random Access Memory W..... Watts W..... Width WAN . . . . . Wide Area Network WATS . . . . Wide Area Telephone Service WMF . . . . . Windows Metafile (vector file format for the PC) WORM . . . . Write Once Read Multiple WPD . . . . . Windows Printer Definition (non-editable PDF for Windows) WRED.... Wrong Reading Emulsion Down WREU.... Wrong Reading Emulsion Up WYSIWYG . What You See Is What You Get (many variations on WYSIWYG have been ..... suggested, including among many others: WYSIMOLWYG, What You See Is ..... More or Less What You Get) XGA ..... eXtended Graphics Array (video display standard) XMO . . . . . eXtended Memory Option XYZ..... (mathematically defined coordinates in the CIEXYZ color space) Y . . . . . . In discussions of color space, Y usually represents luminance YCC . . . . . (color components in Kodak's PhotoYCC color space, where Y represents ..... luminance and the two Cs represent Chroma) YIQ . . . . . . (color components in NTSC color space) YUV..... (color components in SECAM and PAL color spaces) ZIF..... Zero Insertion Factor (socket for microprocessor upgrades)

Please direct any questions or comments to: Jim Hamilton, Marketing Department, Linotype-Hell Company, 425 Oser Avenue, Hauppauge, NY 11788 (For subscription information on the Linotype-Hell technical information series, please call 1-800-842-9721.)

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