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Technology-Augmented Courtrooms: Progress Amid a Few Complications, or the Problematic Interrelationship Between Court and Counsel

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TECHNOLOGY-AUGMENTED
COURTROOMS: PROGRESS AMID A FEW
COMPLICATIONS, OR THE PROBLEMATIC
INTERRELATIONSHIP BETWEEN COURT
AND COUNSEL†

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1.
INTRODUCTION

One of the distinguishing characteristics of the early 21st cen­
tury is likely to be the adoption by many courts of courtroom tech­
nology. Contrary to the expectations or assumptions of many
members of the public and even those of members of the legal pro­
fession, courtroom technology is rapidly becoming a fixture in
many courthouses and many courtrooms throughout the United
States.1

Indeed, recent surveys conducted by the Federal Judicial
Center indicate that approximately a quarter of all U.S. district
court courtrooms can reasonably be said to be "high-tech."2 The

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Lawyers and the Court: Responsibilities, Problems, and Opportunities, An Introduction
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Law School. The Courtroom 21 Project is the world center for courtroom and
related technology. See generally Fredric Lederer, The Courtroom 21 Project: Creating
www.courtroom21.net.

1. See generally NITA, EFFECTIVE USE OF COURTROOM TECHNOLOGY: A Judge's
To the Virtual Courtroom? A Consideration of Today's—and Tomorrow's—High-Technol­

2. Three hundred sixty-three of 1,366 U.S. district court courtrooms have per­
manently installed laptop computer wiring and 370 have monitor-type jury dis­
plays. ELIZABETH C. WIGGINS, MEGHAN A. DUNN, AND GEORGE CORT, FEDERAL
JUDICIAL CENTER SURVEY ON COURTROOM TECHNOLOGY 8–11 (Aug. 2003) (unpub­
lished draft edition) (on file with the NYU Annual Survey of American Law). Still
others have access to portable court equipment that can be installed in the court­
room for a specific case. See generally NITA, supra note 1; Lederer, supra note 1.
increasing use of courtroom technology can be expected to have a substantial impact, not only on the trial of cases, but also on the way in which lawyers prepare for these cases and eventually even on law school curricula.

Courtroom technology itself is a generic expression used to describe numerous forms of technology that may or may not be collectively present in any given courtroom. Although this increasingly includes Internet connections for counsel in the courtroom, remote appearances via videoconferencing, and even the possibility of immersive virtual reality, traditionally the heart of courtroom technology has been what is usually referred to as evidence presentation technology; that is, the use of technology, particularly document cameras or computers, to display electronic images to the fact finder, judge, or jury.

These images, when shown to jurors, appear either on large screens, whether rear projection, wall- or ceiling-mounted-screens with front projection, or else on small, computer monitor LCD displays. It is generally accepted that the use of technology to present evidence, which includes presentation of information in the form of opening statements and closing arguments, substantially shortens trials.

Although no adequate scientific data exist in the area, the numerous judges and trial lawyers who have visited the Courtroom 21 Project or have participated in its programs customarily opine that one quarter to one third of traditional trial time is saved. There have been those who have suggested that fifty percent is a more accurate figure. This time savings often does come at an expense. The expense is not so much the cost to court or counsel of the

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4. A document camera is a vertically mounted television camera that when projected to a display device allows counsel to show images of anything under the camera, customarily documents, photographs, and physical objects. Often known as "Elmos," these cameras are marketed by a wide variety of companies including DOAR Communications, WolfVision, Samsung, SONY, and ELMO.

5. The Hon. Michael Hogan, former Chief Judge of the United States District Court for the District of Oregon, for example, opined at the 2003 Eighth Court Technology Conference in Baltimore during a Courtroom 21 program that he had recently achieved a fifty percent time savings in one significant case. Courtroom 21 experimentation suggests a minimum time savings of about ten percent even in a short, one-hour case with only a few documents. Display technology may also assist the finder of fact given that many people are at least visual learners who will better understand information presented visually as well as aurally.
technology itself, but rather the difficulty that is inherent in preparing the case for trial itself.

In order to present electronic images at trial, counsel must have electronic images, which may require the scanning of paper documents before trial or the preparation of sophisticated computer databases in order to make useful the more advanced computer-based evidence presentation packages. Notwithstanding these added complications and case preparation, the Courtroom 21 understanding of the collective experience in the United States and elsewhere suggests strongly that we are to applaud the result. There is reason to believe that fact finders better understand and better remember the evidence that is presented to them using this technology. Trials are, as already noted, faster. If they are both faster and better, we have a valuable advance.

II. POTENTIAL COMPLICATIONS TO THE INCREASING USE OF COURTROOM TECHNOLOGY

At the same time, it becomes clear that lawyers are at a potential disadvantage in the new world. The traditional law school curriculum has only comparatively recently embraced clinical and trial practice courses. Only at William & Mary School of Law are students mandatorily trained in the use of courtroom technology, though it is true that an increasing number of law schools provide in their elective trial practice classes technology-based trial instruction.

Today's modern trial advocate needs not only first-hand knowledge of doctrines such as the hearsay rule and of practical considerations such as how to work with a court reporter who is too often struggling to hear the too rapidly speaking trial lawyer, but also a surprisingly expansive grasp of the technological options currently available. This includes the multiple ways of presenting evidence as well as the potential use of court reporter-based technologies to capture components of the record in real-time and to make use of that capture for cross-examination and preparation of jury instructions.

6. All second-year law students receive courtroom technology training in the Courtroom 21 Project's McGlothlin Courtroom as part of their Legal Skills curriculum. The students then are required to use technology in their required bench trials. Students with a greater interest in courtroom technology from a trial practice perspective can take the elective Technology Augmented Trial Advocacy course.
The advent of videoconferencing and its rapid adoption in courts make possible the use of remote witnesses, particularly remote experts, at far lower cost than ever before and at far greater convenience. Indeed, the same technology permits pretrial preparation, including pretrial deposition, at reduced cost and enhanced efficiency.

None of this comes without complication. Although courtroom technology perhaps surprisingly presents few new evidentiary problems, some practices are clearly troublesome. Perhaps the most obvious is the use of videoconferencing for remote witness testimony. Although increasingly accepted in civil practice, remote testimony of prosecution witnesses clearly raises constitutional confrontation issues. Accepted by the Florida Supreme Court in the seminal case of *Harrell v. State*, in which eye witnesses testified via satellite from Argentina, an attempt to affirmatively authorize remote testimony on an exceptional basis under the Federal Rules of Criminal Procedure was blocked by the United States Supreme Court. In a classic turn of phrase Justice Scalia observed,

As we made clear in *Maryland v. Craig*, a purpose of the Confrontation Clause is ordinarily to compel accusers to make their accusations in the defendant's presence—which is not equivalent to making them in a room that contains a television.

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8. *E.g.*, *Fed. R. Civ. P.* 43(a) (*The court may, for good cause shown in compelling circumstances and upon appropriate safeguards, permit presentation of testimony in open court by contemporaneous transmission from a different location.*).


10. 709 So.2d 1364 (Fla. 1998).

11. Proposed amendments to the Federal Rules of Criminal Procedure are prepared by the Judicial Conference of the United States and transmitted to and promulgated by the Supreme Court. 28 U.S.C. §§ 2072–2073 (2001). When a rule is promulgated by the Court, the Court must transmit the rule to Congress prior to its effective date, 28 U.S.C. § 2074 (2001), so that Congress may, if it chooses, effectively veto it via legislation. Ordinarily, the Court serves merely as a conduit, but as shown by its action with respect to the proposed use of remote testimony in criminal cases it need not do so.
set beaming electrons that portray the defendant’s image. Virtual confrontation might be sufficient to protect virtual constitutional rights; I doubt whether it is sufficient to protect real ones.\(^\text{12}\)

There can be no doubt that the new age of technology-augmented litigation has and will have some legal growing pains. Perhaps the most pressing problem in the area, however, is not a legal one but rather the critical practical problem of how courts and counsel should interrelate in this area. In its most obvious and disturbing manifestation, one can ask how the court should react when counsel announces, “Excuse me, Your Honor, but I seem to have a technical problem.” In fact, however, the question is a broader one, for we must determine how courts and counsel will work together to ensure that we take full advantage of the technological options that we now will have. The difficulty in this area stems in part from the necessary tension between the court’s responsibilities for ensuring justice and ensuring court efficiency on the one hand and the lawyer’s dedication to zealous representation of the client on the other. At the same time, limited judicial resources necessarily play a substantial role.

**A. The Court’s Responsibilities?**

How should a court balance its institutional responsibilities against the trial lawyer’s desire to serve a given client’s interests? This is a matter of increasing importance to the courts. This tension can manifest itself simply in questions of the manner in which technology use can be made. A court may find that its jury monitors (often individual fifteen- or seventeen-inch flat screen computer monitors installed either one for every juror or one for every two jurors) are a more than sufficient way for counsel to show documents to jurors. For reasons of perceived persuasive ability, counsel, however, may much prefer to install in the courtroom a large screen with a large front projection unit so as to ensure a single point of focus for counsel’s presentation and the largest possible image. Should a court that has already invested substantially in individual jury monitors permit counsel her own choice in how to display evidence when that requires the addition to the courtroom of counsel-supplied technology? What then of the difficulties

that one can reasonably expect to take place in a technological legal world?

B. Technology "Failures" and the Courtroom

Traditionally, judges assume that counsel will attend court on time, be properly attired, and will perform competently. All of these can be problematic at times, but everyone understands the legal, ethical, and practical requirements and assumptions. Courtroom technology, on the other hand, is new. Assume that a trial is taking place in one of the many high-technology courtrooms that dot the United States and Australia and which are slowly expanding in number elsewhere.\(^1\) Having been advised of the availability of the courtroom’s evidence display technology, counsel in the midst of a witness examination endeavors to use it, only to discover that the courtroom’s document camera is not working. Counsel advises the judge of the problem and requests assistance. What could or should the court do? An appropriate answer requires that we remember that the “court” pragmatically consists of the judges, court managers, and now, court technologists. What could be wrong?

- Counsel may not know how to use the camera properly;
- Counsel may know how to use the camera properly but may have accidentally failed to do so by chance or fluster, or even intent;\(^1\)
- The document camera may have a mechanical or electronic malfunction;
- The judge or deputy clerk/courtroom technologist may have failed to use the courtroom switching system to enable the document camera’s image to be displayed;
- The courtroom’s video distribution system or switching system may have failed in part or in whole;
- The courtroom’s display(s) may have failed.

\(^{13}\) High-technology courtrooms outside the United States and Australia include courtrooms in Canada, England, Scotland, Israel, Singapore, Hong Kong, and the International Criminal Tribunal for the Former Yugoslavia in the Hague.

\(^{14}\) Mollie Nichols, Courtroom 21 Associate Director for Research and Professional Education, and formerly of the Texas Attorney General’s Office, reports that she has encountered lawyers who purposefully fail to use equipment properly, either because they do not want to appear as a slick city lawyer or because they understand that they will fail to use the equipment properly at some point in the trial. Instead, the lawyer portrays himself as a “poor country lawyer” bumbling along with the new-fangled technology, hoping that the jury perceives counsel’s ability to use the equipment as a success, rather than perceiving his incompetence with the equipment as a failure.
Further, in light of the wonders of modern technology, any electronic or infrastructure problem could be a one time "glitch" or an amazingly difficult-to-diagnose, intermittent problem. In short, a judge confronted by a lawyer with an apparent technical need may have little idea how severe the problem may be or what may be necessary to resolve it. It is easy to suggest that the judge should be sympathetic and helpful. A review of the differing goals of court and counsel, however, makes clear that the suggestion is overly facile.

C. Goals

The court’s overarching function is to resolve disputes fairly. In the real world, the court must do so as quickly as possible using the fewest possible human and financial resources. Most judges appear to wish to be perceived as firm, but fair, of sound judgment, good case managers, and, usually, courteous.

In the Anglo-American adversarial system, counsel seeks to vindicate her client’s position. Success is paramount, and anything that interferes with a case presentation in such a way as to potentially harm the sought-for verdict is highly undesirable. Counsel’s interests, however, are not only the client’s interests. Counsel is constrained not only by law, but also professional ethics, the violation of which can lead to formal sanctions.

The financial and human picture can be contradictory. Lawyers who represent clients on an hourly basis theoretically have no reason to be concerned about wasted time in trial. Yet, those same lawyers often have other cases pending and the need to devote time to those cases, augmented by a potential interest in marketing oneself to future clients as a cost-saving and efficient litigator, may deter unnecessary time wasting. Plaintiff’s counsel working on a contingency fee basis presumably desires the fastest trial that is compatible with winning. Pro bono or government attorneys may not be affected by fees and billing, but like most lawyers usually they are also short of time and desirous of efficiency.

D. Responsibilities

In determining who should do what when technology apparently fails, it may prove helpful to consider who has responsibility for what. Viewed from a functional perspective modern courtroom technology can be roughly divided into evidence presentation, court record, and "data" access and communications. Evidence presentation has been the primary interest of trial lawyers and the fundamental defining element of a high-technology courtroom.
Consequently, we are primarily concerned with problems with evidence display technologies. At the same time, problems with other courtroom technologies are possible as well.

Court record technology is clearly the province of the court, and known problems with it may dictate a sudden halt to the proceedings. Data access and communications are more difficult to classify. Originally, this would have referred primarily to the judge's or clerk's access to electronic information in the courtroom. Now, however, it could include court-supplied videoconferencing to provide remote appearances by judge, counsel, or witness, or wireless connectivity to the Internet for counsel. The former would be a court responsibility. Wireless connectivity, however, is increasingly provided to counsel by private vendors, most notably by Courtroom Connect, via agreement with the court. Whether problems with such connectivity primarily would be a "court" or a "counsel" responsibility would seem to be debatable.

Initially, those lawyers who wished to use evidence presentation technology found themselves forced to obtain their own technology and ask the court's permission to bring it into the courtroom and use it. Although many courts now supply technology, counsel-supplied technology continues. There are a variety of reasons for this:

- The vast majority of modern courtrooms as yet have little or no technology so counsel may have no choice but to bring her own;
- The courtroom may have its own technology, but counsel wishes to augment it;
- The court may supply a complete integrated high technology courtroom, but in almost all cases requires counsel who wishes to use computer-based presentations to bring her

15. Pragmatically, this usually consists of "input" devices such as document cameras and computers and display devices such as computer monitors, televisions, and front or rear projection equipment. Annotable display devices that permit lawyers to write or emphasize images are hybrids that combine features of both.

16. Today this could include electronic docketing, access to e-filed materials, case and jury management software, access to legal materials, access to a real-time court record transcript, and general access to the Internet.

17. Courtroom Connect, a Courtroom 21 Participating Company, is a private firm that supplies courtroom Internet connectivity to trial lawyers. The company can provide a court with a free independent wireless network for trial lawyer use. The company receives the right to charge counsel for use of the network in return for its installation and operation of the network in the courthouse. This arrangement can be advantageous to the court as it safeguards the data security of the court's own network while providing a service to counsel at no expense to the court. See generally http://www.courtroomconnect.com (last visited Nov. 9, 2004).
own notebook computers and connect them to the court-
room's visual display systems.\textsuperscript{18}

When courts do supply counsel with evidence presentation

technology, that technology may be permanently installed in the
courtroom or may be portable and installed by the court staff in
that particular courtroom for that case. A number of courts are
now using cart-based portable evidence display systems, often with a
projector unit that projects counsel's visual materials on a perma-
nent or portable screen.

Courts that supply technology may be classified as permissive
or mandatory. A permissive court supplies technology and permits
its use by counsel on a voluntary basis. A mandatory court requires
the use of its installed technology by counsel.\textsuperscript{19} The latter is more
characteristic of federal than state courts within the United States
and more likely to apply to major cases.\textsuperscript{20} Mandatory courts likely
are acting to maximize efficiency in case presentation.

\textbf{E. People and Resources}

It should go without saying that a court consists of far more
than its judge, yet we too often tend to ignore that critical fact. In
the area of courtroom technology, we must also take into account
the court's managers, administrative staff, and, especially, its
technologists.

Few judges are "techies." When an apparent technical prob-
lem arises, those that are may choose to make a short suggestion
from the bench. If that is insufficient, it would be unusual and
likely indecorous for the judge to leave the bench to try to
troubleshoot a problem,\textsuperscript{21} especially when the problem is related to

\textsuperscript{18} This stems from the court's reasonable fear that allowing counsel to use
CDs, DVDs, floppy disks or other media in court-supplied computers would permit
at least the unintentional contamination by computer viruses of the court's com-
puter and network.

\textsuperscript{19} A mandatory court may also mandate providing discovery and evidence
via computer media.

\textsuperscript{20} Australia's Royal Commissions provide an Australian analog. In these ma-
jor judicial inquiries (a special combination of what to an American would seem to
be a legislative hearing combined with a grand jury), major technology is made
available by vendors who are retained by the court for the duration of the Commis-
sion. See e.g., http://www.elaw.com.au (last visited Nov. 8, 2004). Technology use
is then mandatory; the evidence is submitted in advance to the Commission staff
and then displayed during the hearing by Commission staff at the request of
counsel.

\textsuperscript{21} Although, I am aware of one distinguished judge who does in fact try to
assist counsel during recess.
counsel’s presentation. I know; I have done it occasionally in student cases. It is disruptive and inconsistent with the judge’s role, and, if repeated, can compromise the judge’s necessary image of impartiality. If the judge is not to do so, who is available from the court staff to assist?

The obvious answer would be the court’s technologists, but this assumes too much. The average court may not even have a staff member who is well skilled in the courtroom’s technologies, as distinguished from a computer, or may have other experts whose jobs may overlap. Courts that have developed or hired courtroom technologists customarily only have a few of them and they may not be instantly available, especially in courthouses with multiple technology-augmented courtrooms. Courts with technically trained deputy clerks or bailiffs should be able to provide first level immediate, onsite, help, but that help is likely to be highly limited.

The court’s senior managers are unlikely to be courtroom technologists and even if they are it would be an inappropriate use of their critical skills to have them troubleshoot cases. Ultimately they are important to this discussion because they, more than anyone else, have the practical day-to-day responsibility to determine resource priorities and allocations, and to advise the court’s judges on the consequences of those decisions. In short, the court manager ought to know what the court staff can do and recommend to the judges what the staff should do. But, what then, of counsel?

It is safe to infer that most lawyers have not received law school-based technology-augmented trial practice instruction. They must therefore develop their skills after graduation from law school. The National Institute for Trial Advocacy (NITA) has begun to offer technology-augmented trial practice instruction, as has the Courtroom 21 Project. Federal and state prosecutors have access to the National Advocacy Center and its numerous technology-augmented practice courtrooms.\textsuperscript{22} In past years the Texas Office of the Attorney General provided technology-augmented evidence presentation instruction and continues to do so.\textsuperscript{23} Notwithstanding these efforts, there are few in-depth opportunities for trial lawyers in general to learn technology presentations skills. This tends to trigger discussions focusing on court responsibility for training the bar, especially when the court unveils a new high-technology courtroom.

\textsuperscript{22} Information on the National Advocacy Center is available at http://www.usdoj.gov/usao/eousa/ole.html (last modified Sept. 7, 2004).

\textsuperscript{23} Discussion with Mollie Nichols, Courtroom 21 Associate Director for Research and Professional Education, and previously Director of Litigation Training, Office of the Texas Attorney General (Nov. 1, 2004).
The question of the degree to which a court could or should provide the local bar with training assistance is an ongoing debate.\textsuperscript{24} Most courts with high-technology courtrooms seem to have implicitly agreed that they have an orientation and familiarization requirement. Thus, they supply the bar with some form of information about the court's equipment, perhaps by videotape or web site, and may provide the bar with onsite opportunities to visit the high-technology courtroom when it is free. Some may conduct periodic familiarization sessions, and some may set up ad hoc case-specific meetings. These tend to be equipment-specific sessions. They are rarely if ever general training sessions. When the organized bar is involved, the tendency for the bar is to provide lectures or demonstration sessions rather than detailed hands-on training. In short, most trial lawyers are unlikely to be able to easily find comprehensive trial presentation legal technology training. Of course that does not foreclose appropriate training and education; it just makes it harder.

Lawyers have a general professional ethical duty of competence.\textsuperscript{25} Should that duty extend to competence in employing courtroom technology, as we would urge that it does, it creates an affirmative duty on counsel to learn how to be at least an adequately competent high-tech trial lawyer when attempting technology use. With the ethical imperative in play, judges should be able to assume basic competence on the part of counsel appearing before them. They, and the court generally, ought not to have to assume responsibility for assisting a lawyer with basic operations that a lawyer ought to know.\textsuperscript{26}

A potential complication comes into play when counsel hires an outside vendor to handle counsel's technology. The Courtroom 21 position has long been that ideally counsel should operate pres-

\textsuperscript{24} See generally Courtroom 21 Court Affiliates Protocols for Use By Lawyers of Courtroom Technology § 3-40.00 (2004).

\textsuperscript{25} ABA Model Rules of Prof'l Conduct R. 1.1 (2004) ("A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation.").

\textsuperscript{26} For example, a notebook computer ordinarily will not output its video to an external monitor (here the courtroom's display distribution system) unless it is instructed to do so, customarily by pressing keys "fn" and F8 together. The court should not have to instruct counsel in how to do this. Similarly, unless otherwise set, most computers have default power-saving schemes that will put the computer to "sleep" if unused for a long enough time. The court should not need to assist a lawyer who complains of catastrophic system failure when the only problem is counsel's ignorance of the need to alter the power-saving time periods.
entation technology personally. However, we have qualified that position to add that if counsel lacks either competence or self-confidence, counsel should use a competent assistant or outsource in-court support to a commercial vendor. Should a judge be able to assume that at least outsourced technology support is “expert” support? Does outsourcing potentially deprive counsel of some degree of judicial discretion with the judge assuming that although counsel might merit some court assistance an expert’s help should negate the need?

F. Responsibilities

It is not ordinarily the court’s responsibility to assist counsel who is having difficulty arguing law or trying a case. The adversary system assumes competent counsel. The court does have discretion, however, to step in so long as it can do so impartially, and in criminal cases the court may have a special duty to do so to protect the rights of the defendant. If counsel has the responsibility to act competently when using technology at trial, what, if anything, is the court’s responsibility?

In part the answer to this question may depend on perspective. Is courtroom technology ever the court’s responsibility? In courthouse design seminars and at other times United States District Judge James Rosenbaum of Minneapolis has argued that courtroom technology is so essential that it should be equated with light, heat, and air conditioning as basic responsibilities of the court. When the courthouse’s basic systems fail, no one expects the lawyers to step in and restore habitability.

Yet, even if one agrees with Judge Rosenbaum, does permitting or even providing courtroom technology carry with it responsibilities for its maintenance and use? Whether the court is mandatory or permissive could prove not just relevant, but determinative. If the court mandates the use of technology, especially its own technology, one can plausibly argue that it voluntarily takes on a special responsibility to assure that its technology works and to assist counsel when she encounters a difficulty that counsel cannot reasonably be expected to be able to resolve without court help.

At the same time, many members of the legal profession are unsure of how to classify the use of courtroom technology. To

27. Telephone discussion with the Hon. James Rosenbaum, United States District Judge for the District of Minnesota (Nov. 10, 2004) (courts "should consider providing courtroom technology" in order to avoid the effects of disparity of wealth on the part of litigants).
some it appears an optional "frill" of uncertain value (a perspective of course that is hard to maintain in a mandatory court). If courtroom technology is an elective matter of no great consequence, arguably its absence or failure is not a matter of consequence to counsel or court.28

What indeed is the consequence of the court's providing courtroom technology to counsel, even on an optional basis? Is it reasonable to argue that the court has done so without any responsibility to assure, at least, that the technology works? If the court's courtroom technology does work, does the court take on any responsibility to passively or actively assist counsel who cannot make the technology work properly?

G. Technology in an Imperfect World

In an ideal world, we might posit the following assumptions or conclusions:

- The court has made sufficient information about its technology available to counsel well in advance of trial;
- Counsel are competent and know how to use their own (counsel-supplied) technology as well as that provided by the court;
- Court-supplied technology is regularly checked each day before trial and is regularly and properly maintained;
- When technical malfunctions occur, they are readily and quickly diagnosable;
- Each court has in the courtroom a technically trained and competent staff member who is readily available to troubleshoot;
- Each court has at least one high-end technologist available to troubleshoot major infrastructure or other equipment problems along with sufficient spare parts for reasonable repair;
- The judge can grant a recess of sufficient length to permit any necessary repairs or adjustments;
- If a delay in presentation is necessary, a party's presentation of the case will not be adversely affected by the problem.

Note that even in an ideal world, a lengthy recess might be necessary in any given case. We do not, however, live in an ideal world. In the real world it is at least possible that not a single one of

28. Of course, if it is of such uncertain value, we should be questioning why we are devoting such great resources to installing and using technology in our courtrooms in the first place.
these assumptions or conclusions is accurate. Yet, the court still must deliver justice and do so in an efficient fashion. Accordingly when counsel says, "Excuse me, Your Honor, but I seem to be having a technical problem, may I please . . . ."

What should the court do?

III. THE COURTROOM 21 COURT AFFILIATE PROTOCOLS

The Courtroom 21 Court Affiliates are a growing number of state, federal and foreign courts and government agencies interested in the efficient use of courtroom technology to enhance the administration of justice. Numbering in excess of 2,000 judges and 2,500 courtrooms, the Courtroom 21 Court Affiliates are supported by the Courtroom 21 Project at William & Mary Law School which also assists them in supporting each other. Conferees at the 2003 Courtroom 21 Court Affiliates Conference in Williamsburg, Virginia met to debate the mutual responsibilities of court and counsel in the area of courtroom technology and especially to discuss what the court should do when an apparent technical failure takes place. As a consequence of those discussions, and others, the Affiliates have prepared The Courtroom 21 Court Affiliates Protocols for the Use By Lawyers of Courtroom Technology, a form of recommended best practices. A copy of the current working draft follows as an appendix. The draft was reviewed by the Court Affiliates at its 2004 annual conference in San Antonio and subsequently was adopted.

At the risk of oversimplification, the Protocols recognize two primary duties: counsel's duty to use technology competently, whether personally or via counsel's selection of technical assistance, and the court's responsibility to provide information and familiarization concerning its equipment and the court's policies regarding the use of courtroom technology.

The Protocols also make clear what is not the court's responsibility. Section 3-10.00 declares that "A court has no duty to supply counsel with courtroom technology." And, critically, § 4-10.00 provides:

It is counsel's responsibility and not the Court's to present counsel's case. When counsel experience a technical problem while using or attempting to use courtroom technology, it is counsel who have the primary responsibility to resolve the problem or to proceed promptly without the use of the problematical technology. This applies equally to the use of Court owned or controlled technology and that supplied by counsel.
Under § 4-10.00 the court may, but need not, give counsel further assistance. The Protocols, embodying the experience of many judicial officers, court managers, technologists, and lawyers, reflect the realities of today’s resource-constrained courts and difficult-to-diagnose technology problems. The court’s function is to administer justice. When technology can no longer assist the court in fulfilling that overriding goal, the technology must be put to the side or abandoned. Counsel’s desire to persuasively convince the fact finder of the client’s position does not alter the court’s overarching goal of bringing justice to the case. Given counsel’s ethical duty to represent the client competently, this leads to the conclusion that counsel ought to be prepared to proceed in a high-tech trial with adequate backup technology and when that is inadequate to use non-technology, traditional means, unless that is simply impossible.

IV. CONCLUSION

William & Mary Law School embodies in some ways a fundamental contradiction. It is on the one hand the oldest law school in the new world, founded when George Wythe, signer of the Declaration of Independence, famous lawyer, legislator, and judge was appointed at William & Mary as the nation’s first Professor of Law and Police. It is also the home of the Courtroom 21 Project which fondly advises visitors that it is “where the past combines with the present to produce the future.” Located very near to Colonial Williamsburg, at the Law School the past often seems to coexist with the future. When Professor Wythe inaugurated the nation’s first moot courts, we can be certain that no courtroom technology was

29. Of course, in some cases that simply may not be possible. The Commentary to § 4-10.00 provides in part:

The collective experience has thus been that if a brief amount of time is not sufficient to resolve the problem the trial or hearing must continue, even if that means that the technology is unavailable. Notably this may not be possible in the event of some forms of technology error. A failure in videoconferencing equipment during remote witness testimony may make it impossible to obtain that testimony that day, and alternative witnesses may not then be available in the courtroom. In a mandatory court in which counsel are using electronic presentation of electronic documents because it was either inefficient or difficult to use the physical documents (if they exist), a technology failure may shut the case down as the physical documents may be unavailable.


31. See Reveley, supra note 30, at 186.
present. Oral and written advocacy reigned supreme. Today’s world has massive class actions, toxic torts, major terrorism cases, and courtroom technology. Yet our goal today is the same that George Wythe taught his students—justice. Courtroom technology can be a wonderful asset and can contribute extraordinarily to the administration of justice. Yet, the goal is justice and not technology. As the Protocols conclude, in our modern day justice must be done—even in the event of technical glitches.
APPENDIX:
COURTROOM 21 COURT AFFILIATES PROTOCOLS FOR USE
BY LAWYERS OF COURTROOM TECHNOLOGY

September 20, 2004
Fredric I. Lederer (editor)

TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td>692</td>
</tr>
<tr>
<td>§ 1 Definitions</td>
<td>692</td>
</tr>
<tr>
<td>§ 1-10.00 “Courtroom technology”</td>
<td>692</td>
</tr>
<tr>
<td>§ 1-20.00 “legal technologist” and “courtroom technologist”</td>
<td>693</td>
</tr>
<tr>
<td>§ 1-30.00 Types of courts</td>
<td>694</td>
</tr>
<tr>
<td>§ 1-31.00 “Prohibitive courts”</td>
<td>694</td>
</tr>
<tr>
<td>§ 1-32.00 “Permissive courts”</td>
<td>694</td>
</tr>
<tr>
<td>§ 1-33.00 “Mandatory courts”</td>
<td>694</td>
</tr>
<tr>
<td>§ 2 Counsel’s Duty to the Court and Client</td>
<td>694</td>
</tr>
<tr>
<td>§ 2-10.00 Counsel’s duty of competence</td>
<td>694</td>
</tr>
<tr>
<td>§ 2-11.00 General awareness of customarily used or available courtroom technology and the nature of any Court policies or informal practices concerning its use</td>
<td>695</td>
</tr>
<tr>
<td>§ 2-12.00 Awareness of available court-supplied technology and the nature of any Court policies or informal practices concerning its use</td>
<td>696</td>
</tr>
<tr>
<td>§ 2-13.00 Familiarization with operation of courtroom technology</td>
<td>697</td>
</tr>
<tr>
<td>§ 2-20.00 Shared use of technology</td>
<td>697</td>
</tr>
<tr>
<td>§ 2-21.00 In general</td>
<td>697</td>
</tr>
<tr>
<td>§ 2-22.00 In criminal cases</td>
<td>698</td>
</tr>
<tr>
<td>§ 2-30.00 Communications with the Court</td>
<td>699</td>
</tr>
<tr>
<td>§ 2-31.00 Notice of intent to use technology</td>
<td>699</td>
</tr>
<tr>
<td>§ 2-32.00 Duty to keep the Court current</td>
<td>699</td>
</tr>
<tr>
<td>§ 2-40.00 Coordination with the Court’s technical staff</td>
<td>700</td>
</tr>
<tr>
<td>§ 3 A Court’s Duties to Counsel</td>
<td>701</td>
</tr>
<tr>
<td>§ 3-10.00 Duty to supply courtroom technology</td>
<td>701</td>
</tr>
<tr>
<td>§ 3-20.00 Duty to provide information to potential counsel</td>
<td>701</td>
</tr>
<tr>
<td>§ 3-21.00 In general</td>
<td>701</td>
</tr>
<tr>
<td>§ 3-22.00 Court rules or procedures</td>
<td>702</td>
</tr>
<tr>
<td>§ 3-22.10 In general</td>
<td>702</td>
</tr>
<tr>
<td>§ 3-22.20 Counsel’s ability to depart from the court’s established technology or customs</td>
<td>703</td>
</tr>
<tr>
<td>§ 3-22.30 Exhibits and court record</td>
<td>704</td>
</tr>
<tr>
<td>§ 3-30.00 Orientation and familiarization</td>
<td>705</td>
</tr>
<tr>
<td>§ 3-40.00 Training of counsel</td>
<td>705</td>
</tr>
</tbody>
</table>
PREFACE

Although yielding exciting and fruitful improvements in the nature of trials, the rapid expansion in the use of courtroom technology in state and federal courts has also presented us with an increasing number of difficulties. These include communication gaps between court and counsel concerning court technology availability and the court’s policies for technology use as well as the court’s likely reaction to technical failures during trial. The Courtroom 21 Court Affiliates discussed these matters extensively during their 2003 annual meeting in Williamsburg at William & Mary Law School. California Affiliates unable to attend the annual meeting due to budget constraints addressed the matter at a special meeting held in San Francisco in the Fall. Courtroom 21 staff subsequently reviewed the Affiliates’ positions and produced the first working draft, which was circulated to the Affiliates for review and comment. The Protocols were then reviewed and refined in the 2004 San Antonio meeting and electronically circulated for final comments. These Protocols are the product of the collective experience of judges, trial lawyers, court managers, and legal technologists.

The material that follows represents the collective experience and recommendations of the Courtroom 21 Court Affiliates to date. The Protocols are a form of “best practices” and should evolve with time. They are not intended to be court rules, but rather recommendations to bench and bar. It is the hope of all concerned that they will spur further discussion of these important pragmatic matters. The Court Affiliates will utilize their collective experience to update the Protocols as time and experience warrant.

§ 1
DEFINITIONS

§ 1-10.00 “Courtroom technology”

For the purposes of these Protocols, “courtroom technology” is the technology installed or used in a courtroom by or for counsel or pro se parties. It includes court record technology only to the degree that counsel or pro se parties use that technology during a
trial or hearing for purposes other than preparation of appellate matters.

Commentary

The primary purpose of these Protocols is to assist the court and counsel in their interactions concerning courtroom technology. Accordingly, the Protocols use a narrow definition of "courtroom technology" which ordinarily would emphasize evidence presentation technology. A broader definition, which would include court record technologies for the purpose of making the record for appellate purposes (or to assist the judge during trial), any of the docketing, case management, legal research or other technologies used solely by the court, and the like is outside these Protocols.

§ 1-20.00 "legal technologist" and "courtroom technologist"

For the purposes of these Protocols, a "legal technologist" is a person whose courtroom functions include the operation of courtroom technology. A "courtroom technologist" is a member of the court staff or a person employed by or appointed by the court for that purpose who is in some degree directly responsible for the supervision, maintenance, or operation of courtroom technology.

Commentary

Courtroom technology is valueless without competent persons to operate it. Technology operators are at least functionally "legal technologists." A legal technologist may but need not be an attorney. This definition distinguishes a "legal technologist" from a "courtroom technologist."

Courts that have chosen to install or welcome courtroom technology often have technical staff members who are assigned supervisory, maintenance, or operational duties with respect to it. These persons are defined as "courtroom technologists." Counsel seeking to use courtroom technology frequently have formal or informal contact with these important staff members. This definition of "courtroom technologist" ordinarily excludes counsel or third party vendors or technology experts obtained by counsel for their assistance in a case. It may include, however, non-court personnel who have been employed by (as has been done in Australia in particular) or appointed by (e.g., the Courtroom 21 Project, which was appointed as Executive Agent for legal technology in Commonwealth v. Malvo) the court to support or implement the use of courtroom technology.
§ 1-30.00 Types of courts

§ 1-31.00 "Prohibitive courts"

A "prohibitive court" is one that rejects by rule or custom all or nearly all use of courtroom technology.

§ 1-32.00 "Permissive courts"

A "permissive court" is one which allows but does not require significant use of courtroom technology.

§ 1-33.00 "Mandatory courts"

A "mandatory court" is one which requires the use of one or more forms of courtroom technology.

Commentary

These Protocols do not customarily distinguish among the three types of courts specified in their application. They are defined, however, for two primary reasons: the classification may be helpful in describing courts, and because some believe that mandatory courts owe a greater degree of assistance to counsel who have technical difficulties than do other types of courts. See § 4 infra. Most courts are believed to be permissive. However, anecdotal evidence indicates that some courts are mandatory, at least insofar as presentation of documentary evidence is concerned in large document cases. Although there have been reports of prohibitive courts, none can be said with assurance to actually exist.

§ 2
COUNSEL'S DUTY TO THE COURT AND CLIENT

§ 2-10.00 Counsel's duty of competence

Counsel and their agents who use courtroom technology should be competent in doing so. Non-court personnel who assist counsel in the operation of courtroom technology act as counsels' agents and are equally bound by the duty of competence.

Commentary

Whether counsel may sometimes have an ethical duty to use courtroom technology to effectuate their ethical duty to represent the client zealously and competently is a matter not addressed by these Protocols. Counsel do have an obligation to use courtroom technology competently when they attempt to do so, however. Incompetent use of courtroom technology likely results in wasted
court time and, if court staff attempt to assist counsel, possible waste of court resources. Given counsels' position as officers of the Court, such waste should be avoided. Further, given counsels' duty of competent representation to the client and the risk that incompetent use of technology may harm the persuasive nature of counsel's case presentation, counsels' ethical duties to the client also impel a duty of competent use.

Absent Court requirements to the contrary, counsel need not personally operate courtroom technology. They may rely in whole or in part on staff or third party vendors. However, counsels' duty to use courtroom technology competently is not affected by the actual operation of that technology by others; those operating the technology act as counsels' agents unless the Court requires that court personnel operate the courtroom technology.

Competent use of courtroom technology in the context of any specific case usually requires compliance with the remaining portions of § 2-10.00. The Protocols do not define “competence,” however, leaving to another day a possible set of detailed standards. Competent use of courtroom technology, however, requires that counsel or their agents understand how to use that technology. An inadequate understanding likely will result in either the reality or appearance of a malfunction, usually interrupting trial. Case presentation via a computer, for example, usually requires the operator's understanding of how to connect the visual output of the computer to a display device (or courtroom visual display system). Counsel who fail to properly set a computer's power saving software have a high probability of having the computer suspend its operation unpredictably which may not only interrupt a counsel's case presentation but also lead to the erroneous inference that the system has malfunctioned and that counsel needs a lengthy recess to recover from the perceived problem.

§ 2-11.00 General awareness of customarily used or available courtroom technology and the nature of any Court policies or informal practices concerning its use

Counsel should have a basic familiarity with the general types of courtroom technology applicable to trials of the type to be tried by counsel and the nature of any Court policies or informal practices concerning its use.

Commentary

Proper use of courtroom technology requires that counsel either directly or through the active participation of other knowl-
edgeable persons, understand the types of courtroom technology potentially useful in the litigation. Competence implies more than just the ability to operate given technology adequately; it implies the ability to choose the type of technology to be used to effectuate the goals of the representation. Counsel have no obligation to use technology. At least in the abstract, however, every counsel should be aware of those options which might enrich the presentation of a case. At the very least, counsel who choose to use courtroom technology ought to be able to make an intelligent and reasonable selection among available technological options.

§ 2-12.00 Awareness of available court-supplied technology and the nature of any Court policies or informal practices concerning its use

Counsel should be aware of the nature of any courtroom technology available through the Court and the nature of any Court policies or informal practices concerning its use.

Commentary

Courts are increasingly making courtroom technology available to counsel involved in a hearing or trial before the Court. This technology may exist in the form of installed technology in the courtroom, including fully integrated high-technology courtrooms, wired courtrooms that are augmented in a given case by court supplied cart-based courtroom technology, or via court-owned or controlled courtroom technology that may be made available to counsel. Court supplied technology often is available to counsel at no cost, and its use and operation is understood and perhaps even supported by the Court. In order to make intelligent and reasonable decisions about whether to use courtroom technology, what technology to use, and whether to seek Court consent for counsel to bring into the courtroom non-Court technology, counsel must have an adequate awareness of any courtroom technology that is available from the Court.

In making a decision about the possible use of courtroom technology, counsel must be aware of any Court policies or informal practices concerning its use. This is especially true should the Court be either a prohibitive or mandatory one.

Many courts require counsel to present their case from a single location, often a lectern or podium equipped with courtroom technology. From a trial practice perspective, counsel need to know whether they are free to depart the podium and whether they are able to operate the courtroom technology from other locations (including use of a portable remote control). Many courts have noted
that counsel sometimes ask, often with little or no notice, to relo­
cate technology-equipped lecterns or podia. Courts often have pol­
icies concerning this with which counsel should be familiar before
the trial of the case.

§ 2-13.00 Familiarization with operation of courtroom technology

Counsel should be familiar with the method of operation of
any courtroom technology to be used in the trial or hearing and
the implications of that operation for the trial or hearing

Commentary

Counsels' duty of zealous representation to the client as well as
counsels' status as officers of the court impels the conclusion that
counsel should understand the probable impact of the planned use
of courtroom technology on the trial of the action. Installed dis­
play equipment in some courts may require that the courtroom
lights be dimmed or darkened entirely, either of which could nega­
tively affect a counsel's planned presentation of evidence, opening
statement, or closing argument.

§ 2-20.00 Shared use of technology

§ 2-21.00 In general

Counsel seeking to use courtroom technology in the most cost­
efficient fashion ordinarily are best served by joint use of the tech­
nology planned for a given trial or hearing and joint use ought to
be a Court's normal policy, subject to necessary case-specific excep­
tions. When non-Court owned or controlled technology is to be
used, joint acquisition and use is best effectuated by advance plan­
ning and coordination among the parties. However, unless other­
wise required by Court rule or order, in non-criminal cases non­
Court owned or controlled technology obtained by one party at its
own expense need not be shared with other parties, each of whom
is responsible for the acquisition, installation, and operation of that
party's courtroom technology.

Commentary

Some of the reasons for the installation of high-technology or
technology-augmented courtrooms are to provide an equal playing
field for all parties, to encourage the use of courtroom technology,
to diminish the cost to litigants of obtaining their own courtroom
technology, and to avoid the unsightly and potentially unsafe need
to wire courtrooms for one-time uses of outside technology. When
multiple parties seek to bring their own courtroom technology into a courtroom or hearing room, they frequently create difficulties for the court inasmuch as the parties need time to install the equipment which with its wiring may adversely affect the appearance and the operation of the courtroom. Multiple versions of the same technology substantially complicate the situation and ought to be avoided to the degree possible.

From the client's perspective, sharing courtroom technology may permit a substantial cost savings. Current practice often has counsel presenting their case primarily via the use of one or more notebook computers. Well designed courtroom technology would permit the use of multiple computers either all concurrently attached to a display system or seriatim. In no case should counsel need to share computers with the associated concern about improper access by one party to confidential matters of another.

Courts may wish to require joint use of specified equipment, such as document cameras, which by their nature do not implicate counsel's work product or client confidence concerns.

Although technology sharing is highly desirable and ought to be strongly encouraged, there would appear to be no justification for requiring one party that has obtained courtroom technology at its own expense to make that technology available to other parties of no expense to those parties. Doing so would be unfair and would discourage the responsible use of courtroom technology.

§ 2-22.00 In criminal cases

In criminal cases, courtroom technology used by the prosecution at a trial or during a hearing should be available for the use of indigent defendants or for those defendants the Court determines ought to have such access for financial reasons.

Commentary

Criminal cases are special. The constitutional requirements for due process and fair trials make an uneven playing field especially unacceptable. Accordingly, prosecution use of courtroom technology ought to permit the Court to order the prosecution to make the technology available to an indigent defendant. The Protocol does not require that the prosecution operate the technology or instruct the defense in its use, only that the given technology be made available for defense operation.

Although there is substantial agreement that indigent defendants and their counsel should have access to prosecution technology, the matter is far less clear for defendants who can afford to
retain counsel. From one perspective, courtroom technology is simply another defense expense. From the other, there is little justification for burdening the defense with yet another cost (which might make it choose to refrain from acquisition of courtroom technology) which the defendant may not be able to afford. The Protocol allows the Court to take the defendant’s financial status into account in deciding whether to allow the defense access to prosecution supplied courtroom technology.

§ 2-30.00 Communication with the Court

§ 2-31.00 Notice of intent to use technology

Unless otherwise governed by Court rule or practice, counsel intending to use courtroom technology in a given trial or hearing should give notice of that intent in writing to the Court and opposing counsel a reasonable time before the trial or hearing. The notice should include an itemized list of the technology that counsel desire to use and any special requirements dictated by its installation or operation, should it be courtroom technology to be supplied by counsel.

§ 2-32.00 Duty to keep the Court current

Counsel who have given notice of an intent to use courtroom technology in a given trial or hearing should advise the Court (and as appropriate any assigned court reporters) of any material changes in counsel’s planned use of courtroom technology. Counsel should affirmatively notify the Court should the case settle, be rescheduled, or if counsel decide not to use courtroom technology.

Commentary

Although the Court ought to have either a rule or standing order setting forth intended courtroom technology use by parties, in the absence of such a formal Court requirement, as officers of the court counsel should take it upon themselves to advise the Court, and opposing counsel, with specificity, of their intent to use courtroom technology. Such advance notice will permit the Court sua sponte to schedule a hearing to discuss the matter should it find counsels’ plans to be problematical. Ordinarily, and subject to Court practices, such notice should be made in written form, whether electronic or otherwise. In major cases and in special circumstances the Court may wish to require, or counsel may wish to submit, such notice in the form of a formal motion.
To avoid a potentially substantial waste of valuable personnel time, counsel should ensure that prior courtroom technology plans that have been communicated to the Court staff are keep current. Court staff, including the court's legal technologists and as appropriate court reporters (who in some jurisdictions may not be court employees), may not be aware of changes in case status. Accordingly, counsel should not assume that because the Court is aware that the case has been discontinued or rescheduled that court staff responsible for dealing with courtroom technology are familiar with those changes. Ordinarily, informal communication ought to be sufficient in the event that a case has been formally discontinued or rescheduled.

§ 2-40.00 Coordination with the Court's technical staff

Subject to Court rule or practice, counsel intending to use courtroom technology at a given trial or hearing should coordinate the planned use with appropriate courtroom technologists, and as appropriate court reporters, a reasonable time before the trial or hearing. Court staff will not assist counsel in their case-specific adversarial efforts.

To the degree possible, when using Court owned or controlled courtroom technology counsel should test any counsel supplied courtroom technology that must connect to the Court's technology a reasonable time before the trial or hearing to ensure the compatibility of the technology. Neither the Court nor the courtroom technologist has a duty to provide or ensure compatibility.

Commentary

An increasing number of courts employ legal technologists to assist the Court in the management and use of courtroom technology. These courtroom technologists usually can speak with technological authority about the compatibility of proposed counsel technology with the Court's own systems and rules. Subject to the Court's preferences, direct technical communication between counsel and the court technologists can be very helpful to obviate otherwise potentially significant technical problems. Checklists prepared by the technical staff may be an appropriate way of assisting counsel and those employed by counsel in this general area.

Counsel should ensure, however, that they do not confuse the technical role of the Court's legal technologists with the distinct roles of judge and court administrator. Counsel should further understand that the court technologists are not to assist counsel in counsels' attempt to win their case, but rather are neutral experts...
whose job it is to ensure that counsel can function properly within
the technological constraints of the given courtroom or hearing
room.

Court reporters increasingly provide realtime transcription ser­
vice, sometimes augmented by concurrent or delayed web trans­
mission or publication. Counsel who anticipate use of such
technology should also coordinate with the assigned court reporter.

Because given pieces of equipment, notably some notebook
computers and some display devices, are not always compatible, it is
essential that counsel field test their equipment a reasonable time
before the trial or hearing to ensure compatibility. A “reasonable
time” is sufficient time to either correct the incompatibility or to
obtain alternative compatible equipment. Ordinarily this requires
a compatibility test one or more days in advance of the trial or
hearing.

§ 3
A COURT'S DUTIES TO COUNSEL

§ 3-10.00 Duty to supply courtroom technology

A court has no duty to supply counsel with courtroom
technology.

Commentary

Courtroom technology can substantially decrease trial or hear­
ing time, augment fact-finder memory and understanding, and pro­
vide the public with an enhanced understanding of the
proceedings. Although these are substantial and desirable matters,
no legal authority now exists which compels a court to supply coun­
sel with publicly (Court) financed courtroom technology as a gen­
eral matter.

§ 3-20.00 Duty to provide information to potential counsel

§ 3-21.00 In general

The Court should supply counsel who are to appear before the
Court in trials or hearings with any appropriate information that
reasonably could affect counsels’ potential use of courtroom
technology.

Commentary

Courts ought to give counsel sufficient advance notice of Court
policies concerning the potential use of courtroom technology in
the Court’s trials or hearings so as to permit counsel the opportu-
nity to make intelligent and reasonable decisions about whether
counsel should use courtroom technology and, if so, in what man­
ner. Mandatory courts have a special responsibility to advise coun­
sel as far in advance of a relevant trial or hearing of the Court’s
mandates concerning such use.

$§ 3-22.00$ Court rules or procedures

$§ 3-22.10$ In general

The Court should establish and promulgate in appropriate
written and electronic form detailed rules or practices concerning
the use of courtroom technology trials or hearings before the
Court. The Court should in particular set forth any types of court­
room technology that are expressly prohibited or permitted.

The Court should publish for the Bar its position on who is
expected or required to operate the courtroom technology. This
may include specific notice that third-party vendors or support are
welcome, that courtroom space has been dedicated to the potential
operation of equipment by such third parties, or similar rules deal­
ing with third party technology use. If the court has constrained
operation to certain categories of individuals or created a training
requirement or certification process, this should be included.

The Court should notify counsel clearly as to any costs that are
involved in the use or operation of courtroom technology, whether
the Court’s own or controlled technology or that obtained by
counsel.

The Court in jury trials should issue such instructions as may
be necessitated by the use of courtroom technology.

Commentary

The use of courtroom technology in trials and hearings is in­
creasingly common. Use of courtroom technology in trials and
hearings has “traditionally” been ad hoc, with specific rules or prac­
tices often varying depending upon the judge in any given case.
This is systematically undesirable as it provides a potentially great
variance in trial practice depending upon the identity of the indi­
vidual trial judge. If a given court cannot establish rules and prac­
tices of general application within the jurisdiction of the Court, the
Court should attempt to establish consistent rules for any given
courthouse. When such is not feasible or desirable, each individual
judge should make known in some written form the judge’s rules
and policies. This is especially important in the modern world
when counsel may no longer be local. Web-published rules and practices are especially useful.

In determining whether the Court will permit or require the use of certain types of technology, judges, court managers, and technologists should work together to reach an appropriate result. Court technologists should always be consulted in issues dealing with the potential use of technology.

The issue of who is expected to personally operate courtroom technology is especially important, particularly inasmuch as there can be substantial variation in practice. Some courts permit counsel to operate the technology themselves and to present evidence directly. Others require evidence to be submitted to the court’s officers to be displayed by those officers. The court’s culture in this direction should be spelled out clearly.

Courts occasionally have special rules concerning demonstrative evidence, particularly as used in traditional opening statements. If these or similar rules are to be applied to high technology trials requiring, for example, exchange in advance of trial or hearing of computer-based images, such matters should be made clear.

Courtroom technology use can create a need or desirability for jury instructions. Courtroom 21 research, for example, indicates a high probability of jury frustration if counsel show documents too rapidly for jurors to read or obscure significant portions of the documents by what are customarily called “call-outs” (enlargements of key portions of text). Counsel should be encouraged by the court to give the jurors sufficient time to read relevant parts of exhibits. However, particularly if the Court wishes to achieve the maximum time savings that may result from the electronic display of evidence, the Court, in those courts to which such an instruction would be applicable, should instruct jurors that counsel will highlight the parts of exhibits counsel feel most important but that the jurors will later be able to read the entirety of an exhibit during jury deliberations.

§ 3-22.20 Counsel’s ability to depart from the court’s established technology or customs

In setting forth rules or practices concerning courtroom technology, the Court should include any policies and procedures which may prohibit or permit counsel to seek exceptions to those rules or practices.
Commentary

Technology is ever-changing. Any court rules or practices should include the ability for counsel to petition the court by motion for an exception to its normal rules or practices, if only because of the possibility of technological developments which might justify a departure from rules or practices based upon no longer tenable assumptions. Such new developments are distinct, however, from exceptions based solely on counsel preferences.

A court, especially a court with a substantial technology-augmented courtroom, likely will have firmly established expectations for counsel’s actual use and operation of courtroom technology. Counsel, however, may have alternative preferences. When the courtroom has installed multiple small display monitors for jurors, for example, counsel have been known to request permission to bring into the courtroom a large screen and projector to use instead of the small screens. Similarly, when counsel are supplied with a technology-equipped lectern or podium, they often seek consent to either present the case electronically from counsel table or other location (often using an assistant or vendor) or to relocate the lectern or podium for opening statement, closing argument, or both. Such requests can be technologically difficult or impossible, especially if made during or immediately before trial. A court that determines based upon its own experience that given types of requests will be rejected should make that fact clear in its published practices.

§ 3-22.30 Exhibits and court record

When counsel are using courtroom technology, the Court should clearly notify counsel as to the ways in which exhibits will be designated and supplied to the court reporter or other appropriate individual so that all exhibits can be properly identified for appellate purposes. In particular, if technology is to be used to permit annotation of exhibits, the court should make clear whether each annotation becomes a separate sub exhibit designation.

Commentary

The nature of the court record is evolving along with the use of courtroom technology. As we now have the ability to annotate exhibits electronically, whether for reference later in trial or hearing or for the appellate record, the Court should advise counsel and the court reporter of how to deal with annotations and related material. This may become a moot point as courts move to electronically capture the entire presentation of evidence.
§ 3-30.00 Orientation and familiarization

The Court should make known to those lawyers who may appear as counsel in a trial or hearing before it the nature of any courtroom technology installed in its courtrooms and hearing rooms, and any technology owned or controlled by the Court that may be available for counsel’s use. The Court should periodically provide counsel an opportunity to physically view and inspect the court’s courtroom technology and should make available to counsel court staff able to answer reasonable non-case theory specific inquiries from counsel concerning use or operation of the courtroom technology. Court staff must not engage in what is customarily considered adversarial case theory specific litigation support advice.

Commentary

In the interests of both encouraging courtroom technology use and minimizing waste of court time, a Court should make known to counsel as much information about Court owned or controlled courtroom technology as may be reasonably possible. This may include placing information, including photographs and possibly even operating instructions, on the Court’s web site, production of orientation videotapes, CD’s, or DVD’s, and publication of written materials.

Experience has shown us that counsel who will participate in trials or hearings before the Court can be greatly assisted in their decisions on whether and how to use courtroom technology if the Court periodically opens its courtrooms to counsel for a basic courtroom technology orientation and familiarization session at which the Court’s legal technologists can answer specific questions not involving a counsel’s efforts to prove the specific facts of his or her case. Because the Court must at all times be impartial, it is imperative that in their efforts to be helpful court staff do not accidentally or otherwise advise counsel on how better to employ courtroom technology to achieve case specific adversarial goals.

§ 3-40.00 Training of counsel

The Court is not responsible for training counsel in the adversarial use of courtroom technology. This ordinarily is the responsibility of counsel and the Bar. Pursuant to its efforts to encourage efficient use of courtroom technology, the Court may support training of the Bar in the use of courtroom technology to include mak-
ing its courtrooms and courtroom technology available for use in training.

Commentary

Training counsel in trial advocacy is a traditional role of the Bar, albeit one in which judges have frequently assisted in one proper form or another. Trial advocacy instruction carries with it a possibility of judges accidentally being placed in an ex parte role if counsel with active cases before the judges participate in the training. Further, most courts have sufficient financial and personnel resource constraints to suggest that they themselves should be reluctant to offer counsel extensive technology-augmented trial advocacy instruction. Courts, however, have a long recognized interest in encouraging ethical and professional trial practice. Consequently, the Court may wish to assist the efforts of the Bar or third party providers of courtroom technology-augmented trial advocacy instruction. Although this may be done in many ways, one especially effective mechanism may be to permit such instruction to take place in the Court's own courtrooms with the assistance of the courtroom technologists. This has the advantage of furthering the ability of the local Bar to efficiently use the Court's own technology.

§ 4
TECHNICAL PROBLEMS

§ 4-10.00 Counsel responsibilities

It is counsel’s responsibility and not the Court’s to present counsel’s case. When counsel experience a technical problem while using or attempting to use courtroom technology, it is counsel who have the primary responsibility to resolve the problem or to proceed promptly without the use of the problematical technology. This applies equally to the use of Court owned or controlled technology and that supplied by counsel.

Pursuant to their duty of competence, counsel should make every reasonable effort to ensure that counsel will not suffer a technical problem while using courtroom technology in a trial or hearing.

It is improper for counsel to intentionally create a technical problem or to simulate the existence of one to curry favor with a fact finder or to prepare a fact finder for the possibility of a later, real, technical difficulty.

To the degree possible, counsel should have backup technology or traditional, non-technological means, ready to ensure that
the trial or hearing can proceed should a courtroom technology technical problem take place that cannot be resolved in a timely fashion.

§ 4-20.00 Court responsibilities

The Court should make every reasonable effort to ensure that Court owned or controlled technology, to include any infrastructure wiring and control systems, is fully functional for a trial or hearing in which it is scheduled to be used by counsel. Should a known problem exist with the Court’s courtroom technology, whether consistent or intermittent, appropriate court staff should so advise the judge and appropriate court managers who should as administratively appropriate notify counsel of the problem and any alternative solutions as may be available.

When counsel experience a perceived courtroom technology technical problem that may delay counsel’s presentation, counsel should give timely notice to the Court and advise the Court, if possible, of the estimated time necessary to resolve the difficulty. The Court should give counsel a reasonable amount of time to attempt to resolve counsel’s problem, subject to the demands of the case and the number and type of problems, if any, previously encountered.

Technical difficulties encountered by counsel in using Court owned or controlled courtroom technology, especially if the Court is a mandatory one, may justify the Court in exercising its discretion to provide counsel with more time with which to attempt to resolve a problem than would otherwise be provided.

The Court may but need not provide court staff to assist counsel in an effort to resolve an apparent technical problem.

In a jury trial, the Court may wish to instruct the jurors as to the existence of a technical problem and its consequences along with whatever curative instruction the Court may believe is appropriate.

Commentary

Technical problems incident to the use of courtroom technology have proven troublesome. The difficulty is compounded by the fact that it often is very hard to adequately diagnose the problem which can be a result of operator error, software or hardware misuse or incompatibility, infrastructure failure, or device error or failure. A judge faced with an apparent problem has no immediate way of knowing whether the problem is in fact real or just an easily-resolved operator mistake, or whether there may be, for example, a
major systemic failure in the Court’s own technology. Limited technically able court staff further complicate the judge’s ability to determine how best to proceed.

Court technologists should keep court managers and judges advised of potential problems known or expected in the area of the use of the Court’s owned or controlled technology or courtroom technology that will be used by counsel.

The collective experience has thus been that if a brief amount of time is not sufficient to resolve the problem the trial or hearing must continue, even if that means that the technology is unavailable. Notably, this may not be possible in the event of some forms of technology error. A failure in videoconferencing equipment during remote witness testimony may make it impossible to obtain that testimony that day, and alternative witnesses may not then be available in the courtroom. In a mandatory court in which counsel are using electronic presentation of electronic documents because it was either inefficient or difficult to use the physical documents (if they exist), a technology failure may shut the case down as the physical documents may be unavailable.

There has been some feeling that if a problem is encountered in using the Court’s own technology when counsel has been required to use that technology, the Court should be more sympathetic to counsel. In short, a mandatory court may have a higher obligation to counsel than does a permissive court. There is no strong agreement on this, however, and the text provides for that possibility only.

The Protocols consequently place the burden of coping with a technical problem on counsel rather than the Court. This is at least arguably unfair to counsel, at least in cases involving failures of Court equipment. There does not appear to be a meaningful alternative to this at present, however. Accordingly, counsel should have an extensive range of backup options available. Counsel should keep in mind while contingency planning that often courtroom technology permits alternative ways of proceeding. If counsel’s computer should fail, for example, but counsel has paper documents and an available document camera, trial can continue using the document camera.

There have been reports that some counsel who fear the possibility of encountering technical problems later in a case simulate such failures at opportune moments reasoning that this will prepare the jury for a more serious, real, failure if one should occur, and may well curry sympathy in jurors. This is improper and is a form of fraud on the court.
Judges faced with courtroom technology problems in jury trials may wish to issue curative instructions. Some judges may wish to give a general instruction as part of the prefatory instructions.

§ 5
PRO SE LITIGATION MATTERS [RESERVED]

§ 6
CITATION FORM

These Protocols may be cited as, “Ctrm 21 Ct. Affiliate Courtroom Technology Protocols (2004).”