

My collection, combining first team and bench players, includes several laptop computers, a USB air card (cellular communications device for laptops enabling a broadband connection in most major metropolitan areas in the United States), DLP (digital light processor) projectors, smart phones with varying capabilities, scanners, portable printers, global positioning system (GPS) devices, various storage devices, a document camera, digital still and movie cameras, digital voice recorders, portable speakers, noise-canceling earphones, surge protectors, extension cords, a locking security cable, and a variety of cables and connectors that enable me to connect my equipment, charge my equipment, and, when necessary, connect to the equipment of others. Having this collection of gear makes me feel capable of working effectively almost anywhere. I rarely carry the entire kit, but my first team travels with me almost everywhere.

In choosing the tools for your kit, you face many trade-offs related to where you will go, what you will do, and how much you can spend for the equipment. For example, if you intend to make a presentation to a client, at a trial, or at an ADR proceeding, you may need to bring a projector. If you do that presentation in a small room, you may need only a 1,500-lumen to 2,000-lumen unit (lumens are the measure of the light thrown off by the projector). If you plan to speak in a large room or present at a trial in most courtrooms, you will need more power—in the neighborhood of 3,000 lumens. Generally the 2,000-lumen and weaker projectors come in smaller and lighter packages than the 3,000-lumen projectors.

If you plan on doing word processing as well as the presentation and also want to get your e-mail along the way, you probably want to bring a laptop, but you have other options. If your presentation is in PowerPoint, you can bring an Internet-capable personal digital assistant (PDA) that has the ability to handle e-mail. If someone else is presenting with you and will have a computer, you may be able to bring your presentation on a thumb drive (flash memory module) and run it on the other presenter's laptop. You can even run your presentations without a laptop, directly from iPods, some smart phones, or PDAs. If you will have a small audience (one or two), you might consider leaving the projector and screen at the office and simply running the show on your laptop.

Laptops. The laptop has become ubiquitous. Almost everyone has one now. You see them everywhere. For a long time, the laptop served as my primary mobility tool. Although these days I often can get by without one for short trips, I find that laptops remain essential for my full-scale productivity out of the office. I will briefly address some of the issues to consider when purchasing; please see "The Basics: Computers" on page 13 for further information to assist you in your selection process.

If you choose to use a laptop, you will want one that combines light weight, small size, large capacity, and powerful features (preferably at a reasonable price). For those of you who prefer the Windows platform and want a small, relatively lightweight computer, look at the ThinkPad "X" series of laptops by Lenovo (formerly IBM; www.lenovo.com). I have used other small, lightweight computers such as the Fujitsu "P" series (www.fujitsu.com), the Sony "T" series (www.sony.com), and the Toshiba Portege (www.toshiba.com) computers. All of those computers come from responsible and well-known manufacturers. Each has its virtues, but the ThinkPad has impressed me the most in terms of its functionality and its sturdiness. (Note: Lenovo also sells laptops that do not have the "ThinkPad" designation. Those are good units as well, but I rate the ThinkPads higher, particularly in terms of mobile use.) For those who prefer the Mac platform, Apple's 13" MacBook Air (www.apple.com) offers the smallest and lightest option, but you may be better off looking at the heavier and certainly less svelte 13" MacBook. It costs less and has better connection, RAM, battery, memory, speed, and storage options. Note also that the Macs now run Windows either by booting directly into that operating system or running it on a virtual computer inside the Mac OS X platform. All of the computers mentioned above come with small screens (13" or smaller). All come with internal hard drives and either include

Alan Pearlman Nerino J. Petro, Jr. J. Anthony Vittal Randi Whitehead *Ex Officio:* Andrew C. Simpson

Best of ABA Sections Issue Special Issue Editor

Jennifer J. Ator jenniferjator@gmail.com Editorial Board

Elizabeth Bleakley Leslie Caldwell Lloyd D. Cohen David Zachary Kaufman

ABA Publishing

Director of Publishing: Bryan Kay Editorial Director: Claire L. Parins Editor: Robert M. Salkin Editorial Associate: Oreather McLin Design and Production Director: Russell Glidden Senior Art Director: Tamara Nowak Print Administration Director: John Rhead Production Coordinator: Sandy Roders optical drives (CD or DVD) or work with them as external USB attachments. Most such computers come with WiFi (wireless 802.11b/g) capabilities. Many also will accept a PCMCIA or an Express 34 wireless card. Some will also have cellular modems built in to facilitate Internet connectivity.

Although almost any laptop computer can function as a desktop replacement, some do that job much better than others. The class of computers usually referred to as "desktop replacement" consists of laptops that weigh between 7 pounds and 9 pounds, include all of the features discussed in the preceding paragraph, and come with high-resolution 15" or 17" screens.

Internet connectivity. The Internet provides us with means of exchanging e-mail and other forms of communications. It also serves as the primary source of legal research available to lawyers today. For that reason, any laptop we take on the road must have Internet connectivity. Most major carriers offer cellular data accounts for laptops with appropriate hardware. Some of the newer laptops even include built-in cellular modems. The problem with a built-in modem is that it will lock to a specific provider, without regard to how that provider services your area. Investigate what providers offer the best coverage in the areas where you plan to use the connection. I have opted for Verizon because it offers fast and generally reliable connections in the areas where I travel (mostly major cities throughout the United States). You can acquire hardware as a PCMCIA card, an Express 34 card, a USB modem, or even a smart phone that links to your laptop. I use a USB modem because I can move it from one computer to another and even use it on a desktop in an emergency (or a failure of the DSL system in my office).

Digital dictation. I have switched to digital devices for dictation in and out of my office. The quality of digital recording has improved greatly in recent years, and digital files offer great flexibility. If you record your dictation digitally, you can e-mail the electronic files to your secretary, who can type them while you travel. Alternatively, you can e-mail the file to a secretarial service, such as LawDocsXpress (www.lawdocsxpress.com), that will transcribe your digital file and deliver MS Word documents to you the next day. If you provide samples of work you have done in the past, the secretarial service will incorporate your format. Because these services have people working during the night and over the weekend, they can often turn a document around faster than your own secretary can (and with no overtime). As these services charge at a cost-efficient rate, many lawyers use them to supplement their own secretarial staff, and others use them in lieu of having their own secretary.

Speech-to-text programs also have improved in recent years. The most recent evolution of Dragon Naturally-Speaking (www.nuance.com) works quite well, particularly for dictating documents that do not include extensive legal citations. If you properly train the software and use it with a good USB microphone in a quiet environment, you can get quite usable results. If you want to dictate away from your computer, you must use a compatible high-quality digital recorder; don't skimp.

I have developed a strong partiality to the Olympus DS-4000 digital recorder (www.olympusamerica.com). Olympus designed it as a professional dictation unit, and its features reflect that orientation. You can easily transfer its DSS files to a Macintosh or Windows computer through a USB cable for processing through Dragon (Windows only) or to a secretary or transcription service. Philips (www.usa.philips.com) sells a very nice professional handheld dictation unit (the 9600) that works quite well and produces DSS files you can upload through a USB connection. I have recently had the opportunity to try the Philips, and in some respects I prefer it to the Olympus; it is a bit lighter and sleeker, and it gives me longer usage per charge. The Philips also works with a standard SD memory card as opposed to the XD used by the Olympus, and it connects with a standard mini-USB plug instead of the proprietary connector cable provided with the Olympus. Both work fine with Windows computers, and the Olympus works well with the Mac. Although the Philips makes Telephony. For the mobile lawyer, four things have occurred in the field of telephony that present significant advantages, at least most of the time. Likely everyone reading this article already has a cell phone. Not only that, but probably everyone in their office has one, and everyone in their family over the age of 15 (10?) has one as well. Cell phone reception in some places has evolved to a point that many people have stopped using landlines in their homes and instead use the cell phone as their primary telephone. A number of business and professional people have done the same thing with their work and now use the cell phone as their primary business phone number. Most of the cell phones coming out today can access the Internet in some fashion and have color liquid crystal display (LCD) screens, some kind of calendar and contacts storage, and text messaging ability. Many of the phones have built-in cameras; some even take video. An increasing number have some form of turn-by-turn direction system available, and some even have built-in GPS receivers. Subsets of these features used to define what we called a "smart" phone. Most of the cell phones today would be "smart phones" by yesterday's standards. The primary distinction today seems to be whether the phone comes with a real or virtual keyboard (thumb board) instead of or in addition to the standard telephone keypad.

Although I enjoyed the convenience of the small size of Motorola's RAZR and then the MOTOKRZR for some time (www.motorola.com), I have retired them to very occasional use in favor of more versatile and powerful devices. (I am on AT&T, so the phones use SIM cards that I can move from one to another if I choose to do so.) My three favorite smart phones or PDAs as of the present time: the BlackBerry Curve (www.blackberry.com), the iPhone, and the Samsung BlackJack II (running Windows Mobile; www.samsungmobileusa.com). All of them have Internet connectivity: all handle e-mail: and all have thumb boards/full keyboards (the iPhone has a virtual keyboard and the other two have physical keyboards). All have the same basic size and can easily fit in a pocket, purse, or briefcase. All will sync to both Mac and Windows computers; however, the BlackBerry and Samsung require third-party software to sync to a Mac. The BlackJack II and Curve take memory cards to allow you to store additional information: the iPhone does not. but it comes with up to 16 GB of built-in internal memory

Because most cell phones currently made have some ability to access the Internet, providers and others have made more and more content available for us via the cell phone. We can do research on the Internet, chat in instant message programs, watch television, get special reports, and interact on social networks. More content will come in the immediate future.

We could not complete any discussion of telephony without mentioning the use of voice over Internet protocol (VoIP). This technology allows you to make telephone calls through a connection to the Internet. These services work through a computer or through an interface that allows you to connect a traditional wired or wireless telephone to the Internet without going through a computer. You may be familiar with such services; you may even have them at home or work. Skype (www.skype.com) works through your computer; it costs nothing to download and can be used on either the Mac or Windows platform. Calls from one Skype number to another anywhere in the world cost nothing, but the service does charge for connections to non-Skype numbers, whether you call them or they call you. Vonage (www.vonage.com) works either through a computer or through an Internet connection bypassing a computer. AT&T's CallVantage program (www.callvantage.att.com) connects to the Internet via an interface and does not require the use of a computer to make calls. Recently Yahoo! introduced VoIP calling as a feature of

its Messenger program (http://messenger.yahoo.com). Generally, VoIP service will cost significantly less than traditional phone service, particularly for long-distance and international calls. If you want to use VoIP on the road, you will probably find it easiest to use Skype, Vonage, or the Yahoo! Messenger service.

Because cellular devices and reception have shown much improvement in recent years, the VoIP issue may seem less important. In fact, it remains significant because most mobile phones do not yet do as good a job with video conferencing as VoIP, which can provide that functionality as well as much less expensive international calls.

Printing. If you need to print when out of the office, you might want to bring a small portable printer. You can find good ones for \$250 and up. One of the best portable printers I have found, Canon's PIXMA iP90 Compact Photo Printer (www.usa.canon.com) can produce up to 16 pages per minute (ppm) in black-and-white and up to 12 ppm in color, with a resolution of up to 4,800 x 1,200 color dots per inch (dpi). The iP90 works with Windows and Mac OS X.

Wireless printers using Bluetooth technology allow you to avoid carrying connecting cables. The HP DeskJet 460wbt Mobile Printer prints up to 17 ppm in black-and-white and 16 ppm in color.

Although I often traveled with a printer in the past, these days I rarely need a printer for most of my work-related activities on the road. Most major hotels have business centers with computers and printers available for a nominal charge. Many other locations also have such services available. If I need to print something, I transfer the file to a USB thumb drive (usually in PDF format), plug it into a computer at the business center, print my documents, and leave. If I need to print something in another office, I either use the USB drive or e-mail the document to someone in that office who prints it for me. Because such facilities do not often exist in a courthouse, however, it makes sense to bring a small printer to a court appearance, where having the ability to print out a stipulation may prove useful.

I have found one printer so small and light that it inclines me to pack it on most trips as a matter of convenience. The 10" Pentax PocketJet 3 Plus (www.pentaxtech.com) weighs one pound and prints up to 3 ppm using thermal printing technology. The printer works with most handheld PCs and computers running Windows, PocketPC/Windows Mobile, Palm OS, Linux, and Mac OS X. The thermal technology used by Pentax in this device represents a significant improvement over what passed for thermal printing a number of years ago. Pentax sells a special thermal paper that facilitates the higher quality print. The paper does not come cheaply, but it is worth bringing along if for no other reason than to print your boarding pass or an occasional set of instructions.

Scanning. As we move more and more quickly toward the use of electronic files, the scanning function assumes a more significant role in our mobility. Having a scanner in trial may prove useful when someone presents a piece of paper evidence that you want to project onto a screen. Having one at a deposition will enable you to instantly create electronic files of exhibits. At a conference, you can scan documents presented and lighten your load for the trip home. When you travel, you can scan your receipts as you go for convenience. As scanning has grown in importance, the availability of portable scanners has also improved. I have four scanners in my mobile kit: Fujitsu's ScanSnap S510, Fujitsu's ScanSnap S300, Pentax's DSmobile 600, and Planon's RC800 DocuPen (www.planon.com). The ScanSnap units belong in a different class than the others. They both have automatic document feeds and can scan in either simplex (single-sided) or duplex (double-sided) mode. The S510 scans at 18 ppm simplex or 36 duplex and folds up into the size of a football. The S300 comes in a smaller, lighter package and scans at a rate of up to 8 ppm simplex or 16 ppm duplex. The S510 only works with PDF and the 300 is both Twain and Isis compliant. Although Fujitsu makes a case for the S510 and you can move it around with relative ease, I like it better on the

desktop, especially now that I have an S300. The S300 does all the heavier scanning I need on the road. If I will not have a need for any significant amount of scanning, the smaller (11" x 2" x 1.5"), lighter (12.2-ounce) Pentax DSmobile 600 scanner works quite well with both Mac and Windows computers. The DSmobile, a single-sheet, sheet-feed scanner, is both Twain and Isis compliant.

I have one scanner that takes up so little space, I pack it even if I don't think I need a scanner, just as a matter of convenience: Planon's RC800 DocuPen. It works with both Mac and Windows and is so compact that you can literally put it in the inside pocket of a coat without creating a significant bulge. It is about as big around as my thumb (I am not sure how it would relate to your thumb). The DocuPen uses a micro SD card for memory and carries its own power in a rechargeable battery. It works ideally for scanning paper scraps, receipts, and parts of pages. It also works for scanning a page out of a book.

Backup/storage/memory. Laptop manufacturers have made computers stronger, more stable, and less fragile. Nevertheless, they still break down from time to time. You should always have backup available in case of such a problem. Small, highly portable, large-capacity (up to 320 GB so far), high-speed hard disks provide excellent backup. If you get one that you can make "bootable" by installing system software, it can also serve as an emergency disk should your hard disk fail. You can find many sources for such drives operating on FireWire, USB 2.0, or both. You can even find some working on FireWire 800 and eSata connections, which provide even faster data transfer. I am particularly partial to the LaCie Rugged Hard Disk (www.lacie.com), which comes with USB, FireWire 400, and FireWire 800 connections, and to the physically smaller, less expensive, and somewhat less rugged Western Digital USB drives (www.wdc.com) that I usually find on sale at Costco or at Best Buy. The LaCie drives have the advantage of multiple means of connection and will take banging around better than the Western Digital drives. They are also physically larger, bulkier, and more expensive.

USB flash memory drives offer another excellent backup option for a relatively small amount of data. You can find such drives with capacity up to 32 GB on the market now, but the 32 GB drives have just come out and remain somewhat pricey. You can get drives up to 8 GB for relatively reasonable prices. The 16 GB drives started dropping in price as the 32 GB drives came out, but they still sell for around \$100. The USB drives take up less space than a hard disk, but they tend to work more slowly.

Earphones/headsets. You will find your use of the music or video capabilities of your technology significantly enhanced by the addition of high-quality earphones or headphones. If you are flying or in an otherwise noisy environment, noise cancellation or isolation technology may also prove helpful. The Bose Quiet Comfort 2 headphones (www.bose.com) fold into a relatively small package and provide high-guality sound as well as excellent noise cancellation. Bose Quiet Comfort 3 headphones come in an even smaller package. If you do not want to use a headset form and prefer to use earphones, Etymotics (www.etymotic.com) and Shure (www.shure.com) both offer exceptionally good quality earphones using sound isolation technologies to reduce interference from ambient noise. The earphones can work with your computer or with your iPhone, iPod, or other MP3 player. Some manufacturers, such as Shure, make combination devices that also can serve as telephone headsets.

Projectors. You can find small, lightweight projectors in the 1,500-lumen to 2,000-lumen range starting under \$1,000. Generally DLP projectors weigh less, cost less, and take up less space than their LCD counterparts, although that no longer is a hard-and-fast rule. Generally, with projectors, more lumen means more weight and larger size. I have a strong partiality to the Casio projectors (www.casio.com) for the lower-powered units. I particularly like the Casio XJ-S31 (DLP, 2,000 lumens, 1024 x 768 XGA resolution, 3.96 pounds, and a footprint about the size of a standard sheet of

paper). As for 3,000-lumen projectors, InFocus (www.infocus.com) makes my current choice, the new IN37 (DLP, XGA resolution, 2.97" x 10.36" x 8.6", 5 pounds).

Miscellany. In addition to the main pieces of hardware I have identified, I usually carry at least one extension cord, a power surge protector, a laser pointer, FireWire and USB cables, an Ethernet cable, a telephone cable, and chargers. In lieu of the assorted power bricks that my gear requires, I often carry an iGo adaptor (www.igo.com) that will power and charge almost all of my technology via AC, DC, or airline power ports. The iGo packages come with a single power connector and have a variety of attachments available to allow interconnectivity with most major computers, PDAs, and cell phones. The iGo will charge the computer and one smaller device concurrently. I recently discovered a new multiple device charger that I like very much. A company named Callpod (www.callpod.com) manufactures a device called the Chargepod, which consists of a hub that accepts up to six adapters at a time and can charge up to six devices concurrently through one wall plug. Callpod offers adapters for many different devices. It comes with both an AC and a DC connection. Callpod has almost covered the field with its collection of adaptors.

I also carry a Bluetooth telephone earphone. I prefer the inear varieties because they make it easier for me to hear in a noisy environment. My current favorites include Motorola's MOTOPURE H12 (which also has technology to reduce ambient noise) and Apple's Bluetooth earphone for the iPhone. Other good earphones to look at include units from Plantronics (www.plantronics.com) and BlueAnt (www.myblueant.com). I also have found that both Jabra (www.jabra.com) and Cardo (www.cardowireless.com) make very decent Bluetooth units. I also carry a wired earphone for my telephone, in case the battery runs down on the Bluetooth earphone. Carrying some extra batteries for your phone or an external power supply (the only available option for the iPhone) may also prove helpful. I usually take one or more extra batteries for my laptop and one for the phone as well.

Most of us use e-mail heavily. The significance of e-mail as a communications tool has increased both in and out of the office. E-mail access options have dramatically expanded in the last few years. In addition to carrying a laptop and using it at the hotel, at someone else's office, at the airport, or with a wireless modem or a cell phone connection, we can now get e-mail through a borrowed computer, cyber cafés, PDAs, and a variety of wireless communications devices. At least one provider, AOL, has created the ability to get e-mail over the telephone. If you just want to get e-mail, you can leave your laptop at home and carry a small wireless communicator (such as a BlackBerry device or an iPhone), saving yourself several pounds of dead weight. In my opinion, the BlackBerry still does the best job of all the PDAs and smart phones at processing and handling e-mail. That may change in the very near future as other devices begin using the same technology. The iPhone offers a unique interface and handles mail with panache, if not as efficiently as the BlackBerry. In most cases, I strongly prefer a smart phone with the ability to access e-mail on its own without the need of a computer or a wireless hot spot. If you are content to use a hot spot, you get more choices to get by without the computer-some devices, such as Apple's iPod touch, provide the ability to connect with WiFi, and others, like the iPhone, can connect either way.

Relaxation. We all need to take some time off. Heavy travel days limit opportunities for recreation. Games, music, and movies offer a means of bringing your own entertainment with you. Games for the Palm devices have become readily available and can be entertaining. The well-equipped laptop can play both music CDs and DVD movies. It can also run computer games. If you really want to cut weight and don't want to take a computer, you can get very nice, portable DVD players complete with LCD screens that will easily fit in a briefcase or even a coat pocket. And, of course, you can always get one of the iPods (or another form of digital player), which can accommodate music, audiobooks, and data as well as still pictures and video. Be sure to use those high-quality earphones to enhance your enjoyment.

Moving your gear. No self-respecting collector of technology can get by with one briefcase. Basically, you get to choose between cases you carry and cases with wheels. Within both categories, you get size and feature variation. In the class of cases you carry, you also get choices about how: in your hand, over your shoulder, or as a backpack. Some cases carry in more than one way. For example, one of my favorite cases (Wenger's Patriot; www.wengerna.com) has a shoulder strap, a handle, and wheels. The computer section of that case is a removable bag, allowing you to carry the computer and a few accessories or pull the bag out to make room for other things when you need the space. I have packed the Patriot with two laptops (with AC adaptors and extra batteries), files, an iPod, a BlackBerry, a digital recorder, a digital camera, a projector, miscellaneous USB and FireWire connection cables, a computer lock and cable, and some files.

Check out Waterfield Designs' (www.sfbags.com) welldesigned and reasonably priced computer sleeves, camera bags, iPod cases, and other bags. I am particularly partial to the Cozmo and Cargo bags. If you want to carry a relatively small amount of technology, look at Skooba Designs' Pod (www.roadwired.com). I packed a Treo, an iPod, a digital camera, extra batteries, extra memory cards, and a map inside one and still had room for more. Skooba recently discontinued the Pod but has a sale on current stock through its website. You may also find it at various resellers for a while. Skooba "super-sized" its Pod to create the Podzilla. That, too, has been discontinued, and Skooba appears to have no more in stock, but you can still find it from third-party vendors online. If you want one of the better and more expensive dedicated computer bags, look at the Victorinox (Swiss Army) Architecture line. Victorinox bags are somewhat pricey but are well designed and padded to protect computers and accommodate a considerable amount of gear. Brenthaven (www.brenthaven.com) has made any number of bags that I have liked. My current favorite is the Duo II wheeled computer bag. Targus (www.targus.com) has also come out with a collection of reasonably priced and well-designed rolling computer bags.

Often, as with the Patriot, you can find a case with a removable padded section for your laptop. I have often replaced simple padded sections with small cases (padded compartment and a strap), so that I can take just the computer and a few accessories when I want to and still have appropriate protection for it.

If you need very protective and water-resistant cases for your technology, look at the Otter line (www.otterbox.com). Otter makes rough and rugged cases for many devices, iPhones, BlackBerries, etc. The company also makes hard shell cases for laptops. If you are hard on your technology or in a situation where it will get put at risk to the elements, an Otter Box may give you the best protection for your device. The trade-off is that they tend toward bulkiness in order to provide that protection.

Conclusion. Technology continues to advance, and lawyers can leverage it both in and out of the office. Technology has made it possible for an attorney to work almost as functionally out of the office as in the office. The technology that comes with me out of the office often expands to fill available space. When I start with a large case, I end up packing more than when I start with a small case, whether I need it or not. Using a smaller case causes you to think more carefully about what you really need; taking just what you need makes traveling easier. Decide what you need to have and use a case that comfortably accommodates the gear. Remember the first law of mobility: *"Tools make you mobile by helping you work efficiently and effectively on the road, but the more that you carry with you, the less mobile you become."*

Jeffrey Allen is the principal of Graves & Allen, a small firm in Oakland, California. Since 1973 his practice has emphasized negotiation, structuring, and documentation of real estate acquisitions, loans, and other business transactions, receiverships, related litigation, and bankruptcy. He also works extensively as an arbitrator and a mediator. He serves as the editor of the Technology eReport and the Technology & Practice Guide issues of GPSolo magazine. He regularly presents at substantive law and technologyoriented programs for attorneys and writes for several legal trade magazines. In addition to being licensed as an attorney in California, he has been admitted as a Solicitor of the Supreme Court of England and Wales. He holds faculty positions at California State University of the East Bay and the University of Phoenix. You may contact him at jallenlawtek@aol.com.

Copyright 2008

Back to Top

TOPICS A-Z ABA SITE INDEX WEB STORE ABA CALENDAR CONTACT ABA

ACCREDITED BUSINESS Defending Liberty Pursuing Jusice

American Bar Association | 321 N. Clark St. | Chicago, IL 60654-7598 | 800.285.2221 ABA Copyright Statement ABA Privacy Statement Web Site Feedback