Chapter 10
DISABILITIES

INTRODUCTION

One of the aviation industry's stated goals is "increasing the employment of women and minorities." Specifically, "The airline industry should undertake a sustained program to draw women and minorities into (aviation) maintenance."1 An oft-forgotten minority in the aviation industry is people with disabilities.

It may be that people in aviation are perceived as more able-bodied than the general population. The strong influence of the military in the aviation industry lends support to an assumption of fitness; even ground personnel must pass fitness tests to join and to remain in the military. Pilots are tested periodically for fitness. For commercial aviation, however, the keynote speaker at a recent conference pointed out, "There really are no medical standards for maintenance people."2

As in other segments of the working population, the Aviation Maintenance Technician (AMT) workforce is becoming more diverse. It is imperative that all AMTs, including those with disabilities, have equal access to all aspects of our society, including the following:

- employment
- government operations and facilities
- public and commercial facilities
- telecommunications services.

In addition to AMTs, people with disabilities can be found working as outside support or service personnel, subcontractors and their employees, inspectors, customers or clients, union officials, or medical or emergency personnel. They may come to your facility with seeing-eye dogs, wheelchairs, helper monkeys, personal assistants or trainers, or other specialized accommodations for their disabilities.

The Americans with Disabilities Act (ADA), signed into law in 1990, is the first formal recognition by any nation that equality of access must extend to all citizens. The Act addresses the needs of the 10 million (or more) employable people in the United States with disabilities.3 Some call it the most important piece of civil rights legislation in the last 25 years; others call it "almost overwhelming."4 The ADA is meant to remove barriers to opportunity. It does not relieve job applicants from performing required job functions, nor does it preclude an employer from assessing an applicant's abilities. It does not guarantee equal representation of minorities in a workforce, establish quotas, or require "affirmative actions" favoring those with disabilities.5

http://hfskyway.faa.gov/HFAMI/lpext.dll/FAA%20Research%201989%20-%202002/I...
The ADA’s requirement for custom design accommodating an individual's abilities is both the best of past Ergonomics/Human Factors design and the most likely future for the profession. As Frierson pointed out recently, "Effective compliance with the letter and spirit of the ADA will not occur by using the correct forms, learning the technical law, and knowing more about accommodations. . . . Emphasis must be placed upon discovering the abilities of workers, disabled or not."  

This chapter addresses types of disabilities and accommodations useful for removing unnecessary barriers to participation. We also discuss existing regulations that might affect the aviation industry, especially the maintenance domain. The chapter includes checklists and guidelines to help design programs and facilities for people with disabilities. There are practical tips and techniques for accommodating all employees, without undue hardship to the organization. Finally, there is a list of resources, including organizations specializing in disabilities and accommodations.

BACKGROUND

A disability is not the same as a disease; a disability is neither debilitating nor contagious. People with disabilities may be healthier than so called able-bodied people because they receive ongoing medical attention, because they become more knowledgeable about personal health maintenance, or both. As President Bush pointed out when signing the ADA, it makes no sense to spend nearly $200 billion annually to support Americans with disabilities when many, or most, could work independently and gainfully.

Much of the cost of supporting disabled people arises from the Workers' Compensation and Group Medical Insurance systems. Some estimates place costs of disability-oriented Worker's Compensation at $45 billion per year. Many employers have seen costs of group medical insurance increase over 300% in the last decade. Another factor contributing to these costs is the aging US population. The US population lives and works longer, largely because of modern medical innovations. As people get older, they develop more disabilities and require longer, more costly rehabilitation.

Because of innovative medical techniques, many people survive injuries and illnesses that, historically, would have proven fatal. This also leads to more people with disabilities. It is becoming increasingly important not only to prevent injuries and disabilities, but also quickly to return people to work whether or not they suffer permanent impairment.

US Senate and House of Representative committees on disabilities reported the situation in 1990 to be less than encouraging, offering the following findings:

- Pervasive isolation and discrimination toward those with disabilities,
- Barriers to access and participation in employment, public facilities and services, transportation and telecommunications
- Inadequate federal and state disability laws,
- Inferior social, economic, vocation, and education status for people with disabilities.

Costs arising from these limitations are shared by federal, state, and local governments, as well as private sector employers.

Other sources estimate that 48.9 million Americans have disabilities (19.4% of the US population); 29.5 million are in the working age range (15-64 years old). These people have less than a 28% employment rate, compared to over 80% for other people in the same age range. People with disabilities who are employed earn less than two-thirds of the average "able-bodied" employee.

In spite of their limitations, 90% of one company’s 3,000 employees with disabilities received average or above average job performance ratings. Eighty-six percent received similar ratings on attendance, and 97% earned them for safety. Nichols cites a large restaurant chain's comparison of annual turnover rates between those with disabilities (28%) and other employees (250%).
Typical disabilities are listed in Table 10. Mental problems are especially difficult to categorize because many people with such problems are never formally diagnosed. Approximately 20% of the general population have such problems at any time; some people have several mental problems simultaneously. Table 10-2 shows the most frequent mental problems.

**Table 10-1. Typical frequencies of disabilities in US workers, in millions and percentages**

<table>
<thead>
<tr>
<th>Disability</th>
<th>Ages 15-64</th>
<th>All ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing</td>
<td>22 (56%)</td>
<td></td>
</tr>
<tr>
<td>Back or spinal problems</td>
<td>3.9 (31%)</td>
<td></td>
</tr>
<tr>
<td>Developmental difficulties</td>
<td>9.2 (23%)</td>
<td></td>
</tr>
<tr>
<td>Arthritis or rheumatism</td>
<td>2.7 (22%)</td>
<td></td>
</tr>
<tr>
<td>Mental problems</td>
<td>5 (13%)</td>
<td></td>
</tr>
<tr>
<td>Heart problems</td>
<td>1.5 (12%)</td>
<td></td>
</tr>
<tr>
<td>Lung or respiratory problems</td>
<td>1.4 (11%)</td>
<td></td>
</tr>
<tr>
<td>Limb disorders</td>
<td>1.2 (10%)</td>
<td></td>
</tr>
<tr>
<td>High blood pressure</td>
<td>1.0 (8%)</td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>0.8 (6%)</td>
<td></td>
</tr>
<tr>
<td>Epilepsy</td>
<td>2 (5%)</td>
<td></td>
</tr>
<tr>
<td>Wholly or partially paralyzed</td>
<td>1.2 (3%)</td>
<td></td>
</tr>
</tbody>
</table>

**Table 10-2. Most frequent mental problems in the general population (percent)**

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>5%</td>
</tr>
<tr>
<td>Mood disorders</td>
<td>5-10%</td>
</tr>
<tr>
<td>Severe personality disorders</td>
<td>5-10%</td>
</tr>
<tr>
<td>Severe depression</td>
<td>15%</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>1%</td>
</tr>
</tbody>
</table>

In 1961, the American National Standards Institute (ANSI) produced a short document intended to reduce barriers to the physically handicapped. Though only a few pages long, it was the first publication of its type, and many state and local governments adopted its recommendations. The Architectural Barriers Act of 1968 stipulated that all facilities constructed with federal support had to be designed for use by people with disabilities. This act required compliance with the Uniform Federal Accessibility Standards, based on the 1961 ANSI document.
In addition to facilities accessibility, the federal government requires programs and activities supported with federal funding to be accessible to those with disabilities. Authority for this requirement appears in Sections 501, 503, and 504 of the Rehabilitation Act of 1973. These sections apply only to government agencies, contractors, and grantees, respectively. There were no private-sector laws until the Americans with Disabilities Act of 1990 (ADA).

The ADA was developed as the result of subcommittee activities in both the House of Representatives and Senate during 1988. Table 10-3 lists the ADA’s five titles and who has responsibility for administering each. The Act’s purpose is to prevent discrimination against people with disabilities. To do so, it protects people with a physical or mental impairment substantially limiting a major life activity, those with a record of such an impairment, and those regarded as having an impairment.

The first requirements associated with the ADA became effective in 1990. Most requirements were implemented by the end of 1994. Only a few relatively minor bus and train obligations were scheduled for 1995 and 1996. The first group of ADA employment cases reached the federal courts in the middle of 1994. These cases have provided new interpretations of the law and increasingly specific guidelines.

Table 10-3. Titles of the ADA, topics covered, and responsible agencies

<table>
<thead>
<tr>
<th>Title</th>
<th>Topic</th>
<th>Responsible for administration and enforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title I</td>
<td>Employment</td>
<td>Equal Employment Opportunity Commission</td>
</tr>
<tr>
<td>Title II</td>
<td>State and Local Government, Public Services, and Public Transportation</td>
<td>Department of Justice</td>
</tr>
<tr>
<td>Title III</td>
<td>Public Accommodations and Commercial Facilities</td>
<td>Department of Justice</td>
</tr>
<tr>
<td>Title IV</td>
<td>Telecommunications</td>
<td>Federal Communication Commission</td>
</tr>
<tr>
<td>Title V</td>
<td>Miscellaneous</td>
<td>Miscellaneous</td>
</tr>
</tbody>
</table>

ISSUES AND PROBLEMS

Preliminary legal cases and many organizations' common experience indicate that accommodating people with disabilities is practical and cost-effective. Much of the progress made relies on simultaneous advances in accommodation technologies and methods. The greatest remaining challenge to integrating those with disabilities into a workforce may be the abundance of generally accepted myths and false information.

Table 10-4 lists some of the more-prevalent myths about people with disabilities. Data indicate that such myths are usually exactly opposite of the truth. Since an organization's principals can receive personal fines for not complying with ADA, they should exhibit leadership in replacing such misconceptions with accurate information.

Table 10-4. Myths about people with disabilities
Compared with fully able individuals, people with disabilities:

- Are less productive
- Are absent from work more often
- Have higher job turnover rates
- Create a safety risk
- Cause insurance rates to increase disproportionately
- By their presence in a workforce, create unacceptable attitudes and behaviors
- Are too demanding
- Cannot deal with the public without embarrassing their organization
- Require accommodations that are too expensive.

**Job Definition**

Major issues facing organizations under ADA include how to organize work and how to define the essential job functions. Solutions must relate effectively to other Equal Employment Opportunity Commission (EEOC) regulations, interpretations, and actions to avoid fines or other regulatory actions. Unlike much labor or common law, ADA places the legal burden of proof on the employer. Employers must prove they took appropriate steps to accommodate workers with disabilities.

Employers theoretically may define a job's responsibilities as they wish. It may become necessary to defend job definitions when there is an apparent pattern of discrimination against a protected minority such as people with disabilities. The defense could be especially difficult when, for example, those excluded from employment have mental disabilities. Employers would then have to prove that they cannot accommodate such disabilities. The ADA generally favors the individual's interests over the organization's.

Employers retain other specific authorities under the ADA. These include the right to prohibit employees' illegal drug use and use of alcohol at work, the right to require that all employees be free of the effects of alcohol or illegal drugs while at work, and authority to administer appropriate drug screening tests. Drug and alcohol testing are discussed in Chapter 12. An employer can also establish attendance standards, smoking policies, and risk-based benefit plans for all employees.

**Medical Testing**

Under the ADA, an employer retains the right to require medical exams for 1) initial hiring, transfer, and continuation of employment (fitness-for-duty and return-to-work), 2) medical monitoring for potential adverse health effects from work, and 3) general health promotion efforts among the workforce. Medical exams must be relevant to the specific job's requirements and exposures, and they must apply to all applicants or employees in the same job. Medical testing can include the following elements:

- occupational and medical history
Generally, it is necessary to extend a conditional offer of employment to an applicant before requiring medical or health-related information. Any information collected always must be maintained in confidential files, separated from other personnel files. Information must not be disclosed to anyone other than managers, supervisors, emergency personnel, or government investigators, including Workers' Compensation and Second Injury Fund representatives. The organization must similarly protect from disclosure any accommodation made for an employee or anyone else with a disability.

**Insurance Administration**

There are specific ADA implications for Workers' Compensation (WC) system administration. Both the ADA and the Workers' Compensation system intend to help and ensure that an individual achieves his or her full earning potential, so there is no inherent conflict. A WC policy excluding an employee from returning to work after an injury or illness until all functional limitations are removed violates the ADA and would be evidence against an organization. Instead, it is prudent to accommodate any remaining limitations. Also, if an employee claims that he or she cannot perform essential job functions and therefore qualifies for WC, the employee should not qualify as a protected minority under ADA.

The ADA precludes an employer from asking an applicant about WC claims prior to offering employment. It also prevents an organization from not hiring people with prior injuries because it expects increased costs of WC or any other benefit. The so-called "Second Injury Funds" available in all states pay for preexisting medical problems if a subsequent, related injury occurs. For example, if an employee with a previous eye injury (from employment #1) becomes blind as a result of an injury to the other eye (from employment #2), employer #2 pays only for the loss of the second eye, not for total blindness. Employer #1 paid for the first injury, and the Second Injury Fund pays the difference. In some states, it is necessary to notify the fund at the time an organization hires a person with an existing disability.

**Conflicts with Other Laws**

There are possible conflicts among ADA requirements and those of other labor laws, specifically the National Labor Relations Act, Labor Management Relations Act, and existing collective bargaining agreements. For example, the process of accommodating a person's disabilities may require the organization to transfer him or her or to change job responsibilities. Though required by ADA, such actions may raise issues of representation and collective bargaining.

**Facility Accessibility**

Table 10-5. Top 10 ADA claims (July 1992-July 1994)

<table>
<thead>
<tr>
<th>Type of Claim</th>
<th>Percent*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back injuries</td>
<td>20%</td>
</tr>
</tbody>
</table>
Neurological 13%
Emotional/psychiatric 11%
Extremities 7%
Heart 5%
Substance abuse 4%
Diabetes 4%
Hearing impairment 3%
Vision impairment 3%
Cancer 3%

*Note: Total of 31,242 claims

All commercial facilities renovated after January 1992 or newly built and occupied after January 1993 must accommodate people with disabilities. This includes places of employment, retail, service, and professional facilities and any space expected to be used by employees, customers, or clients. It applies to all employers, and the level of accommodation is quite high. Federal government facilities have had to reach virtually the same level of accommodation since 1973.

Research on costs of modifying facilities to provide necessary accommodations found that over 50% cost nothing and 80% cost less than $500. The average cost has been $260, and the median cost has been $50, or less. Over 90% of organizations making accommodations report they are somewhat or very effective.

To encourage accommodations, 1990 tax laws allowed small businesses, i.e., those with less than $1,000,000 in earnings and 30 employees, to take tax credits of 50% of any amount between $250 and $10,250 spent for accommodations. A $15,000 tax credit applies to all businesses removing accessibility barriers. The Targeted Jobs Tax Credit program provides a tax credit to the hiring organization of 40% on the first $6,000 a person with a disability earns during his or her first year of employment. Internal Revenue Service publication 907 covers these credits.

ADA Claims

The EEOC summarized the most frequent ADA claims from July 1992 through July 1994 (see Table 10-5). There were 31,242 claims during this period. Over 10% were for mental disabilities.

Tables 10-6 and 10-7 list the most-frequent facilities complaints or errors made under ADA and similar U.S. laws. The first table shows types of complaints made to the Architectural and Transportation Barriers Compliance Board (ATBCB) concerning Government Services Agency (GSA) facilities during the past 10 years. The second table lists facility design errors rated as occurring almost always in a survey of 11 professional design experts.

Table 10-6. The most frequent complaints received against GSA facilities over the past 10 years

| Type of complaint | Problem type |
Bathrooms: grab bars, entry doors, stalls, sinks, urinals, toilets

Building entrances: ramps, doors, curb cuts, routes

Parking: access, availability, signage, distance from building

Doors: width, force, hardware, clearance

Ramps: availability, slope, landings, handrails, edge protection

Signage: parking, restroom, entrance, height, color, raised characters/symbols

Elevators: size, door signals, door reopening, control panel height, and visual and tactile indicators

Curb cuts: availability, obstruction

Maneuvering space: availability

Accessible routes: passing space, availability to parking, transportation stops, streets

Court rooms: judge's bench, jury box, witness stands, listening aids, restrooms

Water fountains: availability, height

Fire alarms: audible and visual

Telephones: maneuvering space, height, volume controls

Reach ranges: ranges too great

Table 10-7. Facilities design problems that occur almost always

**Site Design**

No accessible route to streets or sidewalks

Insufficient number of accessible entrances/exits

Vertical rise exceeding 1/4" on accessible route

Parking spaces sloped more than 1:50

Accessible parking not closest to entrance

Insufficient curb ramps

**Building Design**

Alterations or renovations that do not provide maximum accessibility

Protruding hazards under stairs & escalators, at counters, fixed equipment, light fixtures, etc.

No edge protection for ramps
Deadbolts outside of reach

Poor spout location in round or oval bowl drinking fountains

Uninsulated or poorly insulated hot water and drain lines at lavatories

Public and common use toilet facilities smaller than 5’ x 5’

Toilet room or stall doors swing into clear floor space at other fixtures

Shower rooms without an accessible shower stall

Non-compliant handrail design

Controls and operating mechanisms over obstructions outside of reach range

Sanitary napkin dispenser accessibility ignored

Medical Care Facilities designed using ADAAG alarm requirements even when not required

Defenses

The ADA recognizes several defenses to an allegation of illegal discrimination. These include the following:

- legitimate and nondiscriminatory actions
- fair selection or exclusion based on previously established and valid tests of abilities or training
- exclusion based on the likelihood that a person may pose a threat to the health or safety of self or others
- absence of reasonable accommodations
- undue hardship imposed on the organization associated with available accommodations
- conflict with other federal laws
- certain defenses associated with religious organizations and food-handling jobs.

REGULATORY REQUIREMENTS

Several sets of legislation have addressed issues of accessibility to facilities and services and special needs of people with disabilities. The Americans with Disabilities Act of 1990 is the most recent and comprehensive. Previously, the Rehabilitation Act of 1973 established many of the definitions and procedures the ADA uses. The Air Carrier Access Act assured air transportation to those with disabilities, if they are otherwise qualified.

Under the Architectural Barriers Act, all federal buildings must be accessible. Education for all children with disabilities was provided for by the Individuals with Disabilities Education Act. Social Security law has provided financial support for disabled individuals. Finally, the Fair Housing Act prohibits disability-based discrimination in public housing.

Related legislation set up procedures, policies, and precedents to enforce the protected minority status of those with disabilities. Title VII of the Civil Rights Act of 1964 applied to employers, state and local governments, and educational institutions. The Equal Pay Act prohibited discrimination in compensation. The Age Discrimination in Employment Act (1967) covered all employment practices and was followed by the Older Workers Benefit Protection Act in 1990. Each allowed greater
The Americans with Disabilities Act

The Americans with Disabilities Act (ADA) requires employers, organizations with public accommodations or commercial facilities, state and local governments, and telecommunication providers to provide facilities and services to everyone equally, regardless of disability. All ADA requirements will be in effect by July 1995, except for complete accessibility to all Amtrak stations and cars and new buses.

Every employer, employment agency, labor organization, or joint labor-management committee must post the ADA notice (or the consolidated EEOC poster) in a conspicuous place, visible to all employees. No explicit statute of limitations is included in the ADA, but some experts suggest using either the 180-day limit of Title VII of the Civil Rights Act or guidelines included in the Rehabilitation Act.

The ADA prohibits discrimination against those with disabilities and protects people who live or have a relationship with them. It would be illegal, for example, to discriminate against someone living with a person testing positive for HIV infection.

Title I

Title I of the ADA applies to employers with more than 14 employees. It prohibits discrimination against those with disabilities and requires active accommodation of existing disabilities. Individuals bringing charges of discrimination under the ADA use the same procedures available to resolve claims under Title VII of the Civil Rights Act. Claimants may also originate a civil lawsuit in state or federal district court to collect equitable relief, attorney fees, and compensatory and punitive damages. The EEOC may bring civil action against an organization. Civil penalties can be as much as $50,000 for the first violation, with a limit of $100,000 for subsequent findings. ADA does not require affirmative action in employment practices.

The ADA prohibits the following general employment actions:

- Limiting, segregating, or classifying a job applicant based on disability
- Entering into a contract that would subject employees to disability-based discrimination
- Using standards, criteria, or administrative methods that would create or perpetuate disability-based discrimination
- Discriminating against an applicant or employee based on his or her association with a person with a disability
- Not making reasonable accommodations for known disabilities.

Unlawful employment practices may occur in any of the following areas:

- recruitment
- hiring
- promotion
- training
- layoff
- pay
- firing
- leave
- job assignments
Title II

Title II requires state and local governments to provide access to all facilities, services, and programs. A person with disabilities can charge discrimination under guidelines of Section 505 of the Rehabilitation Act, which relies on precedent set under Title VI of the Civil Rights Act. Subtitle A covers State and local governments. Subtitle B covers public transportation systems, under the purview of the Department of Transportation, whether or not they receive federal funds. The Department of Justice published its intention in August 1994 to use only ADA Accessibility Guidelines, not the Uniform Federal Accessibility Standards.

Title III

Title III assures that public or commercial facilities and programs are accessible to everyone. This includes office buildings, factories, warehouses, and any other facility whose operation affects commerce—even private air terminals. Though operators of existing facilities need not undertake unreasonable modifications, they must reach the highest possible level of accessibility when undertaking renovations. New facilities must reach this same high level. An organization hosting a conference, developing a course of education or training, or administering a test must comply with Title III.

Title IV

Title IV relates to telecommunication service providers. Its purpose is to ensure that speech- or hearing-impaired individuals have the same access as others to services. Accommodation may be as simple as providing a volume control on a telephone handset. Violations are reported to the Federal Communications Commission for enforcement.

Exclusions

Physical and mental conditions listed in Table 10-8 are explicitly excluded from ADA. Readers should note that infection with the Human Immunodeficiency Virus (HIV), Aids Related Complex (ARC), or Acquired Immune Deficiency Syndrome (AIDS) are protected disabilities.

Existing laws providing equal or greater protection to individuals with disabilities remain in effect under ADA. The Attorney General can certify that any state law, local code, or similar ordinance meets or exceeds ADA Title III requirements.

Rehabilitation Act

The Rehabilitation Act of 1973 prohibits disability discrimination by federal contractors, recipients of federal grants, and participants in federal programs. It includes both mental and physical disabilities. Although most airports receive direct federal aid, most private or commercial airlines do not; they are not subject to this act.

The first predecessor to this act was the Smith-Fess Act which provided rehabilitation to World War I veterans. The Social Security Act of 1935 made such rehabilitation permanently available. Amendments in 1943, 1954, 1965, 1967, and 1968 increased the pool of people covered to include the mentally ill or retarded and ultimately family members. The amendments also increased financing to state programs and for research related to disability and rehabilitation.

Air Carrier Access Act
Although the ADA covers accessibility to public transportation, it excludes airlines (except terminals and related services), school buses, railroad freight and caboose cars, taxis, private automobiles, and some historic vehicles. The Air Carrier Access Act, along with other Federal Aviation Administration regulations, addresses access to air transportation by prohibiting discrimination against an otherwise qualified person.

**Table 10-8. Conditions excluded from protection under the ADA**

- Compulsive gambling
- Kleptomania
- Pyromania
- Disorders resulting from current illegal use of drugs
- Transvestitism
- Homosexuality
- Bisexuality
- Transsexualism
- Pedophilia
- Exhibitionism
- Voyeurism
- Poor judgment or quick temper
- Environmental, cultural, or economic disadvantages (poverty, lack of education, prison record)
- Common physical characteristics (short, red-headed, ugly)
- Advanced age without complications

An example of a disabled, but otherwise qualified person, is anyone with a disability who pays the fare, has the ability to comply with reasonable directions from airline personnel, and otherwise complies with FAA regulations. Legitimate, safety-related FAA rules, such as the requirement to seat able-bodied people in exit rows, are not considered discriminatory. Likewise, a carrier may refuse service to anyone requiring extensive special assistance who failed to provide advance notice of this need. The carrier's services, facilities, ground transportation, and reservation system must be accessible.

**CONCEPTS**

The following list of concepts and definitions helps the reader understand disabilities' issues and how to manage them. Most of these concepts arise from specific legislation and establish both legal principles and tests of compliance. It may be necessary to consult original legislation or subsequent case law to deal with the specifics of a particular situation.
Acronyms

The following acronyms and common names are used extensively in the disabilities literature:

- ABA—Architectural Barriers Act 1968
- ADA—Americans with Disabilities Act 1990
- ADAAG—ADA Accessibility Guidelines for Buildings and Facilities
- ANSI—American National Standards Institute
- ATBCB—Architectural and Transportation Barriers Compliance Board
- DOT—Department of Transportation
- EEOC—Equal Employment Opportunity Commission
- FCC—Federal Communications Commission
- FHAA—Fair Housing Amendments Act 1988
- MGRAD—Minimum Guidelines and Regulations for Accessible Design
- Rehab Act—Rehabilitation Act 1973
- UFAS—Uniform Federal Accessibility Standards 1988

Auxiliary Aids and Services

An organization must provide whatever aids or services are necessary to ensure that no one with a disability is excluded, denied services, segregated, or otherwise treated differently than others. It is especially important that communications are adequate. For instance, it is necessary for a testing authority to ensure that training and testing materials are available to all otherwise-qualified people.

Commerce/Commercial Facility

A commercial facility is any facility intended for nonresidential use in travel, trade, traffic, transportation, or communications among or between states or any foreign country. This definition includes factories, warehouses, office and professional buildings.

Direct threat

An organization must not create a situation in which a person with a disability poses a significant risk of substantial harm to self or others. Decision factors to consider in making this determination include:

- The nature and severity of the potential harm
- The likelihood (probability) of occurrence
- The imminence (immediacy) of the potential harm
- The risk's duration (Is the risk temporary or permanent?)
- Management potential (Can the risk be managed with reasonable accommodation?)

Disability

A person has a disability if he or she has either a physical or mental impairment substantially limiting one or more major life activity. This definition includes a person with a record of such an
impairment or one regarded as having such an impairment. This latter distinction means that a worker can be protected by the ADA even if he or she is falsely regarded as having an impairment, e.g., AIDS.

**Essential functions**

Essential functions are fundamental job duties, as reasonably defined by the employer. These may be the reason the job exists; there may be a limited number of other employees available to perform them; or they may be highly specialized. The employing organization determines how to configure jobs and the essential functions of each. It is imperative that essential functions be included in a written job description along with marginal job functions.

**Impairment**

An *impairment* is any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems:

- neurological
- musculoskeletal
- special sense organs (including speech organs)
- respiratory organs (including speech organs)
- cardiovascular
- reproductive
- digestive
- genitourinary
- hemic (blood) and lymphatic
- skin
- endocrine.

An *impairment* can also be a mental or psychological disorder, such as the following:

- mental retardation
- organic brain syndrome
- emotional or mental illness
- specific learning disabilities.

Covered impairments include the following:

- orthopedic or neuromotor
- visual
- speech and hearing
- cerebral palsy
- epilepsy
- muscular dystrophy
- multiple sclerosis
- cancer
- heart disease
Major Life Activity

To be covered under the ADA or the Rehab Act, a person must have substantial limitations of a major life activity. Examples include caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working.

Marginal Job Functions

Marginal job functions are those job functions determined to be other than essential. An otherwise-qualified individual with a disability does not have to meet these job requirements.

Qualified Individual with a Disability

A person otherwise satisfying the skill, experience, education, and other requirements of a job, but who has a disability, is protected from discrimination based on that disability. The person must be able to meet essential job functions or requirements, with or without reasonable accommodations.

Readily Achievable

Accommodations for disabilities are assumed to be reasonable and are expected when they are readily achievable. This means when they are easily accomplished without undue difficulty or expense. Factors to consider when determining if an accommodation is readily achievable include the following:

- Nature and cost of the accommodation
- The organization's and the local site's financial and human resources
- Number of people affected
- Impact on operation of the site
- Geographical separateness from any parent organization
- Type of organization.

Reasonable Accommodations

Reasonable accommodations are modifications or adjustments allowing access to jobs, benefits, privileges, facilities, activities, or services. They often require an informal, interactive process with the disabled individual to identify his or her precise limitations and the appropriate accommodations.

Record of an Impairment

People with a history of an impairment and those who have been misclassified or misdiagnosed as
having such an impairment are protected under ADA. A person who has recovered from mental or emotional illness or heart disease, for instance, is covered.

**Regarded as Having an Impairment**

A person treated as if he or she has a covered impairment, such as a recovered burn victim, is protected from discrimination based solely on this or similar apparent impairments.

**Retaliation**

The ADA prohibits coercion, intimidation, threats against, or interference with any individual exercising rights under the act, as well as those who assist such a person. For instance, it is illegal for a supervisor to punish a person who testifies on behalf of a fellow worker seeking compensatory damages under the ADA.

**Second Injury**

If an employee who lost sight in one eye while working for a previous employer injures the remaining eye, the current employer is not liable for expenses associated with total blindness. The employer pays only for loss of sight to the second eye. All states now have funds—"Second Injury Funds"—to pay the remaining expenses.

**Service Animal**

A service animal is any guide dog, signal dog, or other animal trained to assist an individual with a disability. Public accommodations must allow those with disabilities to use these animals.

**Substantial Limitation**

The definition of a disability includes a substantial limitation to a major life activity. An impairment becomes a recognized disability when it restricts a person from performing a major life activity an average person in the general population can perform.

**Undue Burden/Hardship**

Undue burden/hardship helps define the extent of an organization's obligation to provide accommodations. Accommodations should not be significantly difficult or expensive. This limit uses the same test factors as readily achievable, but the latter is assumed to be a lower, more easily accomplished standard.

**METHODS**

The most-effective, least-expensive accommodations address specific disabilities on a case-by-case basis. It is usually appropriate to review your organization's situation proactively and to make initial changes that remove barriers to accessibility. It is neither reasonable nor necessary to anticipate every possible accommodation beforehand. The general process to implement an ADA plan is simple in concept:

1. Identify barriers to equal access
2. Identify possible accommodation(s)
3. Assess the reasonableness of each possible accommodation
4. Implement the accommodation(s) that are most reasonable. 

The most significant disability issues facing the readers of the *Guide* are probably those addressed under Title I of the ADA: Equal Employment Opportunity. Most methods described in this section relate to these issues.

Consulting with current employees with disabilities and with local organizations representing people with disabilities are excellent ways to review existing facilities, employment policies, and procedures for possible ADA violations. Job Analysis is the major technique to collect information about a specific job's characteristics. Results of job analysis are documented in a job description. Almost all employers interview prospective employees to collect specific information and to form a subjective opinion about their appropriateness for a given job. Medical and other employee testing provide information about the prospective employee that helps in the selection and matching processes.

**Consultations with Current Employees and Organizations of People with Disabilities**

As noted above, the first step in ADA compliance is to determine if your organization's current policies, facilities, etc., preclude access by disabled workers. Consulting with current employees and organizations knowledgeable about various disabilities is one of the best ways to identify barriers. Although these consultants typically have disabilities, they may also be family members of people with disabilities, members of non-profit organizations, or others trained and experienced in these issues.

Consultations with individuals tend to be informal. When organizations or disability professionals are involved, they usually supply summary reports or checklists. The goals of consultations are to identify and remove current barriers to access. The best feature of such consultations is that, at very little expense, they provide a broad education about disabilities and their effects. Remember that during our lifetime, nearly everyone will either have a disability or be affected by someone else's disability.

**Job Analysis and Description**

Until one understands which tasks, knowledge, skills, aptitudes, etc., are required for a particular job, it is very difficult to say whether or not any individual is capable of performing the job. Job analysis is a category of techniques for determining salient job requirements. The ADA provides only general guidance about analyzing jobs, but suggests that written job descriptions reduce the chances of illegal discrimination.

Key elements in a job description are essential functions and specific requirements for that job. Without written documentation, an organization lacks a key method of proving ADA compliance.

**Applicant Interviewing**

Obtaining information from and about prospective employees has evolved into a sophisticated endeavor. Although job applicants are usually required to undergo a series of written and verbal probes designed to identify relevant professional and personal information, the job application process invariably involves at least one face-to-face interview.

It is important to collect information from prospective employees during an interview and to maintain a fair, consistent employment environment. The ADA prohibits certain discussions during pre-employment data collection. These restrictions apply regardless of whether an applicant is a new hire or a current employee applying for a transfer or promotion.

In general, it is neither appropriate nor legal to ask about disabilities during an interview. The emphasis in job interviews should be on whether the applicant's abilities match the job requirements.
The GUIDELINES section contains rules and suggestions for pre-employment interviews.

**Employee Selection and Testing**

Some employers actively solicit workers with disabilities because of previous positive experiences. Others prefer not to know about disabilities during the initial interview and selection phases. In either case, it is important to be fair and consistent in selecting people and matching them with jobs at which they can succeed. A number of methods are available for selecting, testing, and matching employees with particular jobs. It is particularly important that people with disabilities be matched to appropriate jobs.

**READER TASKS**

Maintenance supervisors and planners, this Guide's intended audience, are often in the "front line" of ADA compliance. In this section, we briefly describe jobs that readers should be prepared to undertake on their own or with the help of a human factors or disabilities expert. It is best to consult with experts when you actually design a job, workstation, or facility. However, common management tasks like interviewing job applicants have a new formality and perspective since passage of the ADA.

**Implementing an ADA Program**

The most general reader task associated with workplace disabilities is to implement a plan to deal with them. This task is seldom given solely to a maintenance supervisor or manager. More often, a company's Human Resources (HR) department has primary responsibility for implementing its ADA program. However, since maintenance managers, supervisors, planners, and others have to live with the program every day, it is in their interests to understand elements present in a "good" ADA program.

**Evaluating an ADA Program**

Any ADA program's overall goal is to accommodate workers' disabilities and to comply with applicable statutes. It is likely that all aviation maintenance organizations of any significant size have implemented some type of ADA-compliance program. It is likely that readers will evaluate an existing program, rather than implement a new one. The GUIDELINES section provides an evaluation checklist for this purpose.

**Analyzing Jobs**

As with implementing and evaluating a plan, many companies place responsibility for analyzing and describing jobs in the HR department. However, jobs analyzed from the perspective of accommodating various disabilities might result in job descriptions different than those ordinarily developed. The GUIDELINES section provides practical advice for analyzing and describing jobs.

**Establishing an Interviewing Process**

Much high-quality information acquired during the pre-employment process comes from face-to-face interviews. Most managers trust their people skills enough to base final hiring decisions on what they see and hear in interviews. While the HR department, if your company has one, usually defines the pre-employment process, the ADA imposes requirements on written and oral interviews.
Selecting and Matching Employees to Jobs

Every manager strives to match workers and jobs in the most effective manner possible. Assigning a person without the appropriate knowledge and skills to a job does a disservice to both the worker and the job. It is also terribly inefficient in a maintenance organization. Workers with disabilities have proven to be exceptionally loyal, hard-working, and reliable. Since managers in any work domain value these qualities, matching disabled workers with appropriate jobs is a “win-win” proposition for the company and the workers.

Accommodating Individual Workers

Accommodation is the key characteristic of the ADA. It is also the feature of the law that has caused employers the most uneasiness, uncertainty, and confusion. There is much less to this requirement than meets the eye. As noted in the BACKGROUND section, most job accommodations are either free or quite inexpensive; employers are exempt from accommodations that are financially onerous. In the GUIDELINES, we provide suggestions and resources that enable managers to make reasonable accommodation decisions.

Establishing Reasonable Disability Etiquette

Just as you try to establish a pleasant and reasonable working atmosphere for groups of employees such as women, racial and cultural minorities, and others, you should also try to make the work environment comfortable for employees with disabilities. Although most employees try to be pleasant and polite with co-workers, many people have never spent time interacting with people with disabilities. These employees don't necessarily know what acts and words are offensive.

GUIDELINES

Though the ADA is relatively new, it is rapidly developing as a topical area. It seems that there are more practical guidelines associated with compliance each day, ranging from formal design guidelines to informal lists of DO's and DON'T's. This section presents some guidelines for your use in managing disability issues.

These guidelines result from considerable study. However, since each situation and each person is different, these guidelines do not guarantee compliance with government regulations or safety requirements. The guidelines are keyed to reader tasks described in the previous section.

Implementing an ADA Program

Although each company's ADA plan is different, successfully implementing a program requires that supervisors and planners take certain actions. As shown below, these actions represent suggested components of a generalized disability management program6 and correlate with the general model of compliance with other government regulations, including OSHA and Workers' Compensation.32 Remember to document your good-faith efforts to comply with the ADA and other regulations.

Obtain Management Support

The most effective way to implement a disability management program (or any other program) is to gain management support throughout the organization. Setting mutual goals, communicating them to other employees, and establishing procedures and methods are the most important aspects of this process.

Develop Case Management
It will become increasingly important to be able to respond effectively to a disability case. Disability cases may arise from a job application by a person with a disability, from a current employee's transfer request, during labor union negotiations, during a government investigation, or following an injury to an employee. The organization should establish beforehand who has responsibility for coordinating the cases. Some companies vest this responsibility in an individual; others use committees.

**Intervene Early**

An organization should try to contact people involved in a disability case within 24 hours after notification. There must be a procedure to notify the disability manager(s) as soon as possible. This reduces future absences, frustration, and anxiety while protecting future accommodations.

**Intervene Positively**

The goals of intervention are to maintain employee morale and to encourage early return to work or effective assimilation into a new work environment. The contact person must express sincere interest in the individual with a disability and thoroughly understand the organization's benefits, procedures, and accommodation process.

**Establish a Return to Work Date**

Establish a return-to-work or start-of-work date as soon as possible. The disability manager must first contact the employee and his or her physician to set the date mutually. If the original date is unreasonable, it is possible to change it.

**Create "Light Duty" Jobs**

Though there really is no universal "light duty" job, it is important to consider job modifications that accommodate a particular disability during initial employment or a return-to-work period. Some jobs may require as few as four work hours per week during this period. Many organizations are creating job categories, such as "Machine Operator A," to allow for modifying jobs and rotating employees when necessary.

**Involve Appropriate Supervisors**

Job modifications do not work unless affected supervisors understand why they exist and provide their support. Educate all employees about the disability program's financial and legal aspects. Involve the supervisors and include disability management effectiveness in their personnel evaluations. Consider charging Workers' Compensation, disability pay, and other costs of disabilities to the supervisor's budget, while allocating accommodation costs to a central budget.

**Study Benefits Program**

Since implementation of ADA, many benefit programs have been changed to ensure compliance. Review your organization's program for discrepancies or outdated practices, and modify them to ensure compliance. Make sure there are no rewards for staying home and not working.

**Choose Experts**

Monitor outside experts assisting with disability cases. These may be physicians, rehabilitation specialists, human factors experts, or other professionals. If the experts are not effective, positive,
and aggressive in dealing with disability cases, let your disability manager know. He or she can then correct the situation.

**Educate Local Physicians**

Personal physicians are key in disability case management, but they usually know little about a person's job activities. This can make them overly conservative in their recommendations. Educate physicians with job descriptions, site visits, and videotapes of work in progress. Establish standards for return-to-work and treatment. Give health care providers feedback on success or failure of their specific techniques or decisions.

**Involve the Person with a Disability**

Do not treat employees with disabilities like commodities. Solicit their opinions on problems, accommodations, and fears to set mutual goals. Follow-up to maintain morale and to identify areas for further improvement.

**Involve Labor Unions**

If your organization has unions, it is beneficial to involve them in developing the disability management program. For example, it is becoming common to establish job categories and to allow rotation among jobs within a category. Flexibility in job, workstation, and facility design increases the number of employees the organization can accommodate.

**Gain Authority to Accommodate**

The supervisor, disability manager, or disability committee must have the authority to provide appropriate accommodations. These may involve changes to facilities, work schedules, or job requirements. Making such changes requires a thorough education in disability management to increase success of interventions.

**Use the Employee Assistance Plan**

An Employee Assistance Plan (EAP) should include information about disabilities and accommodation. It can assist individuals dealing with a disability and related issues. Ensure the EAP is not perceived as punishment or as a way to correct deviant behavior. Disabilities do not cause people to be deviant or unhealthy.

**Consider Job Outplacement**

If a person cannot or will not perform essential job functions, even with reasonable accommodations, it may be necessary to move him or her out of the current job. Consider placement with subcontractors, such as a security company, or vendors, such as travel agents, supply houses, or janitorial services.

**Ensure Confidentiality**

Keep all medical, health, and accommodation information separate from other personnel files. Provide this information only to emergency or safety personnel, to supervisors with a need-to-know, and to government investigators. Communicate confidentiality to employees so as to encourage participation in the disability management program.
Evaluating an ADA Program

The scope and details of ADA are being debated and are emerging in case law. Given the law's novelty and newness of programs attempting to comply, there is no hard and fast set of compliance criteria. Even though we don't know everything that complies with the ADA, we do know that a number of elements must be present.

Table 10-9 was modified from one prepared by the Equal Employment Advisory Council. It can help you evaluate implementation of your disability management program to comply with ADA. Once you have completed this checklist, you will have a record of your efforts and a list of possible program deficiencies.

Table 10-9. ADA compliance evaluation checklist

Verify that you have performed each of the following actions in compliance with ADA guidelines.

**JOB APPLICATIONS AND INTERVIEWING PROCESS**

- Reviewed all application forms
- Added a line to job announcements indicating non-discrimination against disabled
- Posted ADA announcements or joint labor posters
- Prepared written interview guidelines
- Trained all interviewers in ADA technical issues and prohibitions
- Conducted awareness/sensitivity training for interviewers
- Trained managers on ADA
- Communicated your expectations to employment agencies or other agents
- Ensured that interview areas at job or trade fairs are accessible
- Communicated your expectations to reference-checking agencies
- Provided applicants with an overview of the employment process

**JOB FUNCTIONS**

- Prepared written job descriptions, including essential functions
- Established procedure to review job descriptions for completeness and currency, and to update
- Employed proper job analysis techniques during creation of job descriptions
- Identified those jobs or functions that must be done alone, without others available to help
- Specified the consequences of not performing such jobs or functions
- Considered providing written job descriptions to applicants during the interview
Table 10-9: ADA compliance evaluation checklist (cont.)

MEDICAL EXAMINATIONS
- Reviewed and modified existing medical exam procedures to comply with ADA
- Enforced the ban on pre-offer medical exams or histories
- Provided enough job demand detail to examining physicians
- Verified that examining physicians understand the direct threat concept and how to evaluate it
- Involved examining physicians in evaluating accommodations, once implemented
- Modified record keeping procedures to comply with confidentiality requirements of ADA

EMPLOYMENT TESTING
- Specified skill(s) to be tested
- Verified that the test accurately measures this skill
- Evaluated whether the test unfairly measures disability, not skill
- Confirmed that applicants know the availability of accommodation procedures
- Ensured an accessible testing site
- Trained test administrators in accommodation procedures

REASONABLE ACCOMMODATIONS
- Established a process to deal with accommodation requests
- Developed a form to document this process and established how long to keep records
- Established authority and responsibility for the process
- Considered all evaluation factors, including undue hardship, type of operation, and others
- Revised existing policies, such as employee leave, as necessary, to comply with ADA
- Ensured that those with disabilities have equal access to employee benefits, privileges, services, and information
- Provided accessible transportation, if appropriate
- Became aware of external resources, such as the EEOC's Resource Directory

COLLECTIVE BARGAINING
- Reviewed existing agreements or contracts for compliance with ADA
- Considered inserting a clause in subsequent agreements allowing the employer to take whatever action is necessary to comply with ADA

FACILITIES
- Verified accessibility of all employee areas, including, for instance, the breakroom and training areas
- Ensured accessibility of off-site facilities the organization uses
- Reviewed any leases for accessibility
- Reviewed the ADA–Accessibility Guidelines
- Satisfied the need for public accessibility to company facilities
- Provided TDD relay services for other communication facilities or services, as needed
- Set reasonable priorities for removal of existing barriers
- Developed review process for new construction to assure compliance with ADA
- Set up a maintenance/preventive maintenance program to maintain facilities and equipment

Analyzing Jobs

To ensure current and thorough job descriptions it is usually necessary to undertake the following steps:7

- Trained job analyst(s) observe the actual job
- They break the job into individual tasks and activities
- They determine major characteristics of each individual task/activity: importance; criticality; time; frequency; inputs; outputs; tools; aids; and mental, physical, perceptual, or skill requirements
- They solicit input and agreement from job incumbents and supervisors/managers
- They maintain current information through periodic review and modification.

A thorough job analysis provides all information necessary to screen and select appropriate employees for a job. It also provides the basis for valid medical and skill testing. Finally, it can serve as an initial means to identify possible accommodations for specific disabilities. Table 10-10 lists information useful in this process.7

It is always the employing organization's responsibility and right to define essential job functions. Several tests can help separate essential from marginal job functions. An essential function may be the reason a job exists or a highly specialized requirement that only a few employees can perform. Other issues in determining how essential a given function is include the following:7

- The employer's judgment
- Job descriptions written prior to announcing an availability
- The percent of time the employee will spend on the function
- Consequence(s) of not properly performing the function
- Collective bargaining agreements
- Work experience of current or previous job incumbents.

Table 10-10. Information that can be used in the job analysis and
Establishing an Interviewing Process

Under ADA rules, job interviews have restrictions that may seem strange or "silly" to managers who have been interviewing for years. The basic premise of these rules is that individuals should be judged on what they know and what they can do, not on superficial, outdated ideas about certain disabilities.

The interviewer is typically not allowed to ask about an applicant's disabilities or to ask for personal information that allows the interviewer to conclude that a disability might exist. Only when an obvious disability would interfere with job performance can the interviewer ask an applicant how he or she would perform specific job tasks. In other cases, such a request is discriminatory unless all applicants, obviously disabled or not, are required to provide a demonstration.22

Table 10-11 gives specific interview questions to ask and to avoid.22

Table 10-11. Some interview DO's and DON'T's

**DO:**

Tell the person about the company and the job.

Ask about an individual's ability to perform specific tasks.
Ask, “Can you perform the job tasks with or without an accommodation?”

Describe, demonstrate, or simulate job functions.

Ask, “How would you complete each task?”

Ask, “Is there any reason you cannot perform the requirements of the job?”

Ask, “Can you (for instance) lift 50 pounds without difficulty?” if this is a job requirement.

**DO NOT**

Ask about a disability or its characteristics, such as severity.

Ask about the condition, cause, treatment, or prognosis of a disability.

Ask, “Do you have any health-related problems, physical defects, disabilities, or impairments which may keep you from doing certain types of work?”

Ask, “Are you taking any prescribed drugs?”

Ask about previous drug addiction or alcoholism.

Ask about medical treatment and conditions or give a medical exam prior to making a conditional offer of employment.

Ask about previous Workers’ Compensation claims.

Ask about work absences due to illness.

**Table 10-12. Recommendations for interviews with people with disabilities**

- Verify that your interview facility is accessible to those with disabilities.

- Learn the name of the person you are about to interview.

- If the interview is exploratory, focus only on skills, knowledge, and abilities.

- If the interview is for a specific position, learn the position’s requirements and be ready to discuss them with the applicant.

- If the applicant must complete paperwork during the interview, be prepared to assist anyone with limited reading, writing, or document-handling capabilities.

- Interview applicants in the same manner, regardless of whether or not they have a disability, even if you feel apprehensive around people with disabilities.
If the applicant has a sign language interpreter, talk to the applicant, not the interpreter.

Sit down after greeting the applicant. This helps prevent neck strain for people in wheelchairs.

Shake whatever a person offers in greeting: a hand, prosthesis, hook, or elbow.

Sit so your face is not in the shadows and keep your hands away from your mouth. This helps people read your lips.

Be flexible in your communication style to accommodate various needs.

Ask a person with a hearing impairment how he or she prefers to communicate: paper and pencil, lip reading, or computer terminal.

Do not be disconcerted if a visually impaired person does not make eye contact.

Do not ask if a person has a driver's license, unless this is an essential function, or how the person will get to work.

Do not ask how to accommodate a person's disability. The applicant may offer suggestions, however.

Remember, the ADA's purpose is to ensure fair and equal access to those with disabilities. It does not require affirmative action programs or hiring unqualified people. Also, remember that any information about disabilities or accommodations is confidential. The suggestions in Table 10-12 may help you prepare for and conduct interviews with people with disabilities.

Selecting and Matching Employees to Jobs

Figure 10-1 is a Testing and Accommodation Process to help qualify a person for a job and to identify the need for accommodations. The flowchart in Figure 10-1 identifies where in the employee selection and matching process, tests, interviews, training, and accommodation design should occur. All training and testing should comply with ADA requirements for accessibility.

Medical examinations should occur after a conditional offer of employment. They should be specific to the available job and its essential functions. All employees who receive similar conditional offers of employment should undergo identical medical examinations. Information collected during these exams must be kept in confidential medical files, separate from other personnel files. It should be available only to safety or first aid personnel, so they can assist during an emergency; to managers or supervisors, so they can make appropriate accommodations; and to government investigators investigating illegal discrimination.

Drug tests for illegal drug use are not considered medical examinations under ADA and are permitted. See Chapter 12 for current drug testing requirements in aviation maintenance.

The modified Job Matching Check Sheet shown in Table 10-13 offers another way to identify disability problems and accommodations. The Check Sheet provides a convenient form for listing essential and non-essential functions for a particular job. With these functions formally documented, the interviewer has a much easier time evaluating each potential employee. Remember, ADA's ultimate goal is to ensure that people have a fair, equal chance to succeed at gainful employment.
Table 10-13. Job matching check sheet

Name of Applicant: ______________  Disability: ________________________________

Job Title: __________________________________________________________________

Brief Job Description:
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

<table>
<thead>
<tr>
<th>JOB DEMANDS</th>
<th>ESSENTIAL</th>
<th>POSSIBLE DISABILITY-RELATED PROBLEM</th>
<th>POSSIBLE ACCOMMODATION</th>
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<tbody>
<tr>
<td><strong>PHYSICAL DEMANDS</strong></td>
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<td>Walking</td>
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<td>Lifting, reaching, carrying</td>
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<td>Stooping, bending, squatting</td>
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<td>Climbing, balancing</td>
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<tr>
<td>Handling, fingering</td>
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<td>General coordination</td>
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<td>Prolonged standing or sitting</td>
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<td>Vision</td>
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<td>Eye-hand coordination</td>
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<td>Stamina</td>
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</tbody>
</table>

**COMMUNICATION SKILLS**

Writing
Speaking
Hearing
Reading
Interpersonal relationships
Receiving instructions

Giving instructions

INTELLECTUAL SKILLS

Short-term memory
Long-term memory
Abstract reasoning
Decision making
Directing others
Mathematical calculations

WORKING SITUATIONS

Irregular hours
Out-of-town travel
Working alone
Working as part of a group
Working with public
High-speed performance
Constant high stress
Stress of frequent deadlines
Emergency stress situations

Table 10-13. Job matching check sheet (cont.)
WORKING SITUATIONS (cont.)

Leadership skills

Variety of duties

Routine or repetitive duties

Driving vehicles

Operating machinery

ENVIRONMENTAL CONDITIONS

Extreme heat

Extreme cold

Wet or humid

Noise

Vibration

Safety hazards

Chemical exposures

Fumes, dust, or odors

Moving equipment parts

Accommodating Individual Workers

Hiring people with disabilities ultimately results in accommodations for at least some of them. It is possible that general changes will accommodate many people with similar disabilities. These changes are made so all workers can have access to services and facilities. An example of this type of change is a curb cut and ramp to accommodate people in wheelchairs.

Department of Justice guidelines suggest the following priority for changes to facilities. These are intended to accommodate as many people as possible, in the greatest number of situations.6

Priority 1: General access to public accommodations from the public sidewalks, streets, parking, or public transportation.

Priority 2: Access to the specific areas where goods, services, or employment are provided.

Priority 3: Access to restroom facilities.

Priority 4: General access to other areas.

Major design guidelines associated with the ADA are the ADA–Accessibility Guidelines for Buildings and Facilities (ADAAG).34 These arise from ANSI A117.1–1980 and 1986 and the
Uniform Federal Accessibility Standards (UFAS), with some modifications. ADAAG adds scoping information to specify how many guidelines apply and when to apply them. They also cover more facility design areas and emphasize communication for people with vision or hearing impairments. These guidelines are too long to include in this document, but they are readily available.

Table 10-14* lists 10 categories of disability and offers some suggested accommodations. It is interesting to note that able-bodied people also benefit from improved designs arising from ADA guidelines.

<table>
<thead>
<tr>
<th>Spaces and Planning</th>
<th>Difficulties in Processing Information</th>
<th>Limitation of Sight or Total Blindness</th>
<th>Limitation of Hearing, Total Deafness, or Limitation of Speech</th>
<th>Susceptibility to Fainting, Dizziness, or Seizures</th>
<th>Incoordination</th>
<th>Difficulty in Using Upper Extremities</th>
<th>Difficulty in Head Movement and in Sitting</th>
<th>Difficulty in Using Lower Extremities</th>
<th>Limitation of Balance</th>
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<td></td>
<td>Locate and mark emergency routes and equipment conspicuously with redundant visual, tactile, and auditory signals.</td>
<td>Install handrails and grab bars to support 250 foot-pounds.</td>
<td>Provide an obstruction within 27&quot; of the floor to warn of any object that falls within 80&quot; of the floor or protrudes more than 4&quot; from walls.</td>
<td>Provide for configuration of the work area so that workers can face co-workers and customers.</td>
<td>Avoid workstations that isolate workers.</td>
<td>Provide adequate space to accommodate a sign language interpreter, if needed.</td>
<td>Provide electrical outlets at least 15&quot; above the floor, preferably at work surface height for table-top equipment.</td>
<td>Avoid the clutter of power cables.</td>
<td>Avoid electrical or phone outlets on the floor.</td>
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<td></td>
<td>Use window coverings to eliminate glare.</td>
<td>Use adjustable task lighting to reduce the glare of bright room lighting levels a provide individual control.</td>
<td></td>
<td>Avoid lighting that flickers.</td>
<td>Use lighting controls that can be operated with a closed fist.</td>
<td>Provide at least one clear path of travel (without stairs).</td>
<td>Provide a minimum of 60&quot; of clear, level floor space in front of and behind a door and 18&quot; on the latch side of the door.</td>
<td>Provide a minimum of 30&quot; x 48&quot; approach and maneuvering space at workstations and storage areas, as well as space for storing mobility aids.</td>
<td>Provide adequate ambient lighting for lip-reading.</td>
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<td>Mark accessible routes with the universal access symbol.</td>
<td>Minimize distances to essential facilities.</td>
<td>Provide ample, uncluttered aisle space.</td>
<td>Provide 1 1/4&quot; - to 1 1/2&quot; - diameter continuous handrails on both sides of any ramp, 34&quot; to 38&quot; above the finished surface.</td>
<td>Extend handrails 12&quot; beyond the ends of the ramp, with all edges rounded or returned to the adjacent wall, and provide 1 ½&quot; clearance between the rail and the adjacent wall and at least 38&quot; clearance between handrails.</td>
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Table 10-14. Matrix of planning guidelines for accommodating functional limitations* (continued)
<table>
<thead>
<tr>
<th>Spaces and Planning continued</th>
<th>Difficulty in Processing Information</th>
<th>Limitation of Slight or Total Blindness</th>
<th>Limitation of Hearing, Total Deafness, or Limitation of Speech</th>
<th>Susceptibility to Stuttering, Stammering, or Stuttering</th>
<th>Incoordination</th>
<th>Limitation of Upper Extremities</th>
<th>Difficulty in Head Movement and in Sitting</th>
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- Install resilient, non-slip flooring firmly secured to the floor.
- Avoid carpeting pile deeper than 1/2", thick padding, and abrupt changes in friction, especially at changes in levels.
- Mark changes in floor level with visual contrast and contrast in texture.
- Minimize ramp slope; and bowl or ramp any threshold with a rise greater than 1/4".
- Avoid abrupt changes in temperature and humidity.
- Develop and practice evacuation drills.
- Install doors so that they open into an area with lower traffic levels.
- Minimize door-closure resistance, or select automatic doors that are slow-opening and slow-closing.
- Allow a minimum of 18" of space on the latch side of the door.
- Use door hardware that is operable with a closed fist.
- Use slip-resistant wall coverings.
- Use non-slip wall coverings.
- Contrast the colors, brightness, and textures of walls, floors, and doorways.
- Minimize ambient noise, but avoid total sound absorption.
- Provide for attenuation of occasional noise.
- Provide for visual contact with the environment.
- Provide a line of sight through a door at both seated and standing heights; place de on clear glass at both seated and standing face heights.
- Use kickplates or durable finishes to protect the door up to 12" above the floor.
- Avoid revolving doors.
- Configure the work area to avoid the need to rise from the seat frequently.
- Provide chairs that can be adjusted easily from a seated position.
- Provide easily movable or swivel seating.
- Provide a full backrest with adjustability for leaning forward and reclining.
- Provide supportive, adjustable-height armrests.
- Provide a footrest if a worker's feet do not reach the floor.
- Use five-star bases.
Table 10-14: Matrix of planning guidelines for accommodating functional limitations* (continued)

### Table 10-14. Matrix of planning guidelines for accommodating functional limitations*

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<thead>
<tr>
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<td>X</td>
<td>Offer a choice of seating areas in meeting rooms.</td>
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<td>Store materials in order of their use, and avoid frequent reorganization of storage.</td>
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<th>Storage</th>
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<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Locate storage as close to the work surface as possible, storing materials in order of their use and using the most accessible locations for the most frequently used materials.</td>
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<td>X</td>
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<td>X</td>
<td>Locate storage less than one step, or more than a single step, from the work surface.</td>
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<td>X</td>
<td>Position storage no lower than 15” nor higher than 48” above the floor (44” if reaching over an obstruction).</td>
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<td>Locate labels as close as possible to the stored items to which they refer; use contrast in color and brightness; augment words with simple or familiar symbols if possible; and avoid words or symbols that look or sound similar.</td>
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<td>Avoid storing similar items near to each other.</td>
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<td>X</td>
<td>Use open storage whenever possible; where doors are necessary, select side-hinged rather than top- or bottom-hinged doors on cabinets.</td>
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<td>Avoid having a lip on the front edge of a shelf; minimize the friction among the materials and shelves and containers.</td>
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<td>X</td>
<td>Use handles and latches that can be operated with a closed fist.</td>
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<td>Avoid draws deeper than 12”.</td>
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<td>Provide wheeled storage for transporting materials and for transferring them or holding them within easy reach during the work process.</td>
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<td>Use casters for movable storage that are appropriate to the floor covering.</td>
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<td>Position storage to favor pushing rather than pulling, pulling rather than carrying, carrying rather than lowering, lowering rather than lifting.</td>
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<table>
<thead>
<tr>
<th>Signage</th>
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<td>Provide redundant visual, auditory, and tactile information.</td>
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<td>Locate signs so that minimal peripheral vision is required.</td>
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<td>Label clearly to minimize the need for verbal assistance.</td>
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<td>Use upper- and lower-case lettering and high contrast between the lettering and background, accompanied by Braille; and provide generous spacing between characters, words, and lines.</td>
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<td>Minimize the complexity of information.</td>
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* (continued on next page)
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<tr>
<th>Signage continued</th>
<th>Difficulty in Processing Information</th>
<th>Limitation of Sight or Total Blindness</th>
<th>Limitation of Hearing, Total Deafness, or Limitation of Speech</th>
<th>Susceptibility to Falling, Dizziness, or Seizures</th>
<th>Difficulty in Using Upper Extremities</th>
<th>Difficulty in Using Head Movement and in Sitting</th>
<th>Difficulty in Using Lower Extremities</th>
<th>Limitation of Balance</th>
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<tr>
<td>X X</td>
<td>X</td>
<td>Cluster related information; isolate unrelated information.</td>
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<td>X X</td>
<td>X</td>
<td>Augment words with simple symbols whenever possible.</td>
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<td>X X</td>
<td>X</td>
<td>Favor Arabic over Roman numerals.</td>
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<td>X</td>
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<td>Avoid rapidly flashing signs.</td>
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<td>X</td>
<td></td>
<td>Place room identification signs on the latch side of the door frame, 60° above the floor.</td>
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<td>X</td>
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<td>Ensure adequate illumination without glare.</td>
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<td>Use eggshell, matte, or other non-glare surface textures.</td>
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<td>Avoid making workers differentiate between muted pastels or among blues, violets, and greens.</td>
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<th>Work Surfaces</th>
<th>Difficulty in Processing Information</th>
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<th>Limitation of Hearing, Total Deafness, or Limitation of Speech</th>
<th>Susceptibility to Falling, Dizziness, or Seizures</th>
<th>Difficulty in Using Upper Extremities</th>
<th>Difficulty in Using Head Movement and in Sitting</th>
<th>Difficulty in Using Lower Extremities</th>
<th>Limitation of Balance</th>
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<tr>
<td>X X X X X X X X</td>
<td>X</td>
<td>Be sure that work surface heights suit workers and their tasks: generally 25” to 34” for seated work, 33” to 45” for standing work.</td>
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<td>X X X X X X X X</td>
<td>X</td>
<td>Provide for user adjustment in work surface height and angle for certain tasks and limitations.</td>
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<td>Provide for configuration of the work area to suit the worker's dominant side.</td>
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<td>Provide knee space at least 30” wide x 19” deep.</td>
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<td>X X X</td>
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<td>Avoid work surfaces deeper than 36”.</td>
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<td>Use work surfaces whose thickness does not exceed 2”.</td>
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<td>Provide adequate work space to cluster tools and materials within the worker's field of view.</td>
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<td>X X X X X X</td>
<td>X</td>
<td>Provide stable, adjustable support for work tools and materials.</td>
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<td>X X X X X X</td>
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<td>Provide additional surface space and electrical outlets for workers using assistive technology.</td>
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<td>X X X X X X</td>
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<td>Provide ancillary mobile work surfaces.</td>
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<td>X X X X X X</td>
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<td>Provide surfaces sturdy enough for workers to lean on for balance.</td>
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<td>X X X X X X</td>
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<td>Provide rounded work surface corners and edges.</td>
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<td>Avoid slippery finishes on surfaces that may be used for support.</td>
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<td>Select surface materials that minimize glare and friction.</td>
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<td>Contrast surface colors and brightness with those of the surroundings.</td>
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<td>X</td>
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<td>Allow for face-to-face communication between workers at adjacent</td>
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Table 10-14. Matrix of planning guidelines for accommodating functional limitations*
For accommodations to specific or unique functional limitations, the Job Accommodation Network (JAN) maintains a database of accommodations for use by employers in the United States. They also have a reference library and a list of disability experts. Table 10-15 is a form used to report specific accommodations to JAN for use in their database. Contact information for the JAN is listed in the WHERE TO GET HELP section of the chapter.
Table 10-15. Job Accommodation Network Questionnaire

Employer's Accommodation Input Questionnaire
(Before completing, please read instructions and examples on reverse side). Completion of this questionnaire is voluntary. No reduction of quality or quantity of service will result from noncompletion.

1. Name of your company: ________________________________
   Address: ____________________________________________
   Person to contact for further information about this accommodation:
   Name: __________________ Title: __________________
   Phone(______) __________________

2. What is the nature of the disability accommodated?___________________________________________

3. Please give job title and brief description. ___________________________________________________

4. What functional limitations were accommodated? Check all appropriate categories:
   O Partial Loss of Vision O Carrying O Balancing O Handling/ Fingering O Operating Foot Pedal
   O Total Loss of Vision O Reaching O Standing O Pushing/ Pulling O Reduced
   O Concentration O Grasping O Walking O Feeling/ Sensing O Memory Loss
   O Hearing O Sitting O Kneeling O Decreased Stamina O Learning
   O Talking O Lifting O Climbing O Squatting/ Bending O Task Sequencing
   *Others—please specify ________________________________________________________________
   Side(s) of body involved (if applicable): O Right side O Left side O Both sides

5. Describe the solution or modification made and how it works: ________________________________

6. Methods by which accommodation was made:
   Adaptation to existing equipment/ work area. Cost: ________________________________
   Purchase of commercially developed device or aid.
   Type: __________________ Cost: __________________ Date of Purchase: __________________
   Manufacturer: __________________ Available from:______________________________
   Address: ________________________ ________________________
   Other (e.g., time, specially developed equipment, schedule change)________________________

7. Additional comments or special considerations concerning the accommodation (e.g., can be used by non-restricted person also): ________________________________

8. Check the type of organization in which this accommodation is being used:
   O Agriculture O Finance/ Insurance O Health Services O Public Utilities
   O Transportation O Construction O Food/ Lodging O Manufacturing O Retail Sales O Wholesale sales
   O Education O Government O Mining O Social Services
   O Other(s) please specify ____________________________________________________________

Table 10-15. Job Accommodation Network Questionnaire

Table 10-16. Frequency of cases of specific learning disabilities (total = 335)

<table>
<thead>
<tr>
<th>Functional Disability</th>
<th>Frequency (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>71</td>
</tr>
<tr>
<td>Spelling</td>
<td>18</td>
</tr>
<tr>
<td>Visual-perception</td>
<td>12</td>
</tr>
<tr>
<td>Writing (Motor function)</td>
<td>11</td>
</tr>
<tr>
<td>Written language</td>
<td>11</td>
</tr>
<tr>
<td>Mathematical calculations</td>
<td>10</td>
</tr>
<tr>
<td>Attention deficit</td>
<td>8</td>
</tr>
<tr>
<td>Auditory-perception</td>
<td>7</td>
</tr>
<tr>
<td>Memory</td>
<td>6</td>
</tr>
<tr>
<td>Task sequencing/organization</td>
<td>4</td>
</tr>
<tr>
<td>Visual-motor</td>
<td>4</td>
</tr>
<tr>
<td>Socialization</td>
<td>4</td>
</tr>
<tr>
<td>Stress intolerance</td>
<td>2</td>
</tr>
<tr>
<td>Oral communication</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note: Each case may exhibit more than one disability, so the total is greater than 100%.

Table 10-17. Accommodations for the SLDs shown in Table 10-16

<table>
<thead>
<tr>
<th>Accommodation</th>
<th>Frequency (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information to employer</td>
<td>39</td>
</tr>
<tr>
<td>Organization contact</td>
<td>39</td>
</tr>
<tr>
<td>General information on SLDs</td>
<td>30</td>
</tr>
</tbody>
</table>

Assistive Devices

<table>
<thead>
<tr>
<th></th>
<th>Frequency (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer hardware/software</td>
<td>32</td>
</tr>
<tr>
<td>Tape player/dictation machine</td>
<td>19</td>
</tr>
<tr>
<td>Electronic dictionary</td>
<td>8</td>
</tr>
</tbody>
</table>
Table 10-18 lists some examples of disabilities, reasonable accommodations for each, and some legal rights the ADA protects. This is not a complete list of disabilities or accommodations. It is provided for examples and discussion.

**Table 10-18. Reasonable accommodation in employment—definition and examples**

The Americans with Disabilities Act, Section 101(9), states that "reasonable accommodation" may include (A) making existing facilities readily accessible to and useable by an individual with disabilities; and (B) job restructuring, part-time or modified work schedules, reassignment to a vacant position, acquisition or modification of equipment or devices, appropriate adjustment or modifications of examinations, training materials or policies, the provision of qualified readers or interpreters, and other similar accommodations for individuals with disabilities.

<table>
<thead>
<tr>
<th>Impairment</th>
<th>Reasonable Accommodation</th>
<th>Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing</td>
<td>Special equipment (e.g., telephone amplifier, flashing alarms)</td>
<td>Employment can be denied only if it is a legitimate job requirement</td>
</tr>
<tr>
<td></td>
<td>Assistance (interpreter)</td>
<td>Promotion must be on the same terms as if not impaired</td>
</tr>
<tr>
<td></td>
<td>Modified work schedule</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bring hearing dog</td>
<td></td>
</tr>
<tr>
<td>Visual</td>
<td>Special equipment (e.g., talking computer)</td>
<td>Cannot be denied employment due to insurance costs, workers' compensation liability, preference of co-workers or clients</td>
</tr>
<tr>
<td></td>
<td>Assistance (reader, notetaker)</td>
<td>Can deny employment only if it is a demonstrable safety hazard</td>
</tr>
<tr>
<td></td>
<td>Modified work schedule</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bring guide dog</td>
<td></td>
</tr>
<tr>
<td>Mobility</td>
<td>Special equipment</td>
<td>Cannot be denied employment due to insurance costs, workers' compensation liability, or the preferences of co-workers or clients</td>
</tr>
<tr>
<td></td>
<td>Assistance</td>
<td>All employee areas (restrooms, cafeterias) must be accessible</td>
</tr>
<tr>
<td></td>
<td>Modified work schedule</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accessibility to workplace (unless prohibitively expensive)</td>
<td></td>
</tr>
<tr>
<td>Developmental</td>
<td>Special equipment</td>
<td>Can be refused employment only if he or she cannot perform the job safely and</td>
</tr>
<tr>
<td></td>
<td>Assistance (special)</td>
<td></td>
</tr>
<tr>
<td>Impairment</td>
<td>Reasonable Accommodation</td>
<td>Rights</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Kidney Disorder   | Special equipment Assistance Modified work schedule | Cannot be denied employment due to insurance costs  
May be required to provide results of a physical examination  
Cannot be fired unless problem affects ability to do job safely and efficiently  
Health risk associated with job must be demonstrable |
| Diabetes          | Special assistance Special equipment Modified work schedule | Cannot be denied employment due to insurance costs, needs for leave of absence  
Can lose job if condition develops which affects ability to perform job safely and efficiently |
| Epilepsy          | Equipment (safety switch) Informational training for co-workers | Cannot be denied employment unless safety risk is demonstrable in that job  
Cannot be denied employment due to insurance costs, workers' compensation liability, preferences of co-workers or clients  
May be required to provide results of physical examination  
Not required to provide information about illness unless it is job-related |

Establishing Reasonable Disability Etiquette

People do not normally use terms they know to be offensive to others. Although we reserve the right to offend at will in the United States, most of us know that it is usually counter-productive to do so. Table 10-19 lists some undesirable terms relating to those with disabilities and some more acceptable alternatives. 7,9

Etiquette rules provide a framework of behavior to ease interactions and reduce anxiety for all concerned. The rules in Table 10-20 provide guidelines for those new to dealing with people with disabilities and those who wish to refine their interactions.9 Even if you play by the rules, there is no guarantee that other people will reciprocate. This does not obviate a rule, nor should it discourage your using it.

### Table 10-19. Possibly offensive or inaccurate terms and more desirable alternatives

<table>
<thead>
<tr>
<th>Replace this</th>
<th>With this more desirable alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>birth defect</td>
<td>congenital disability</td>
</tr>
<tr>
<td>blind (rare)</td>
<td>partially sighted (usually)</td>
</tr>
<tr>
<td>deaf (rare)</td>
<td>hearing impairment (usually)</td>
</tr>
<tr>
<td>deformed, victim, sufferer, invalid,</td>
<td>person with a disability</td>
</tr>
<tr>
<td>crippled, afflicted</td>
<td></td>
</tr>
<tr>
<td>deviant, mentally deranged, maniac,</td>
<td>persons who are mentally ill</td>
</tr>
<tr>
<td>crazy, lunatic, mad</td>
<td></td>
</tr>
<tr>
<td>fit</td>
<td>seizure</td>
</tr>
<tr>
<td>idiot, moron, mentally deficient or</td>
<td>person with mental retardation</td>
</tr>
<tr>
<td>defective, imbecile, retardate,</td>
<td></td>
</tr>
<tr>
<td>feeble-minded</td>
<td></td>
</tr>
<tr>
<td>Mongoloid</td>
<td>Down Syndrome</td>
</tr>
<tr>
<td>mute, deaf-mute, deaf and dumb</td>
<td>person with a speech impairment</td>
</tr>
<tr>
<td>normal</td>
<td>person who is able-bodied</td>
</tr>
<tr>
<td>spastic</td>
<td>person with cerebral palsy</td>
</tr>
<tr>
<td>special (such as when used for &quot;special education&quot;)</td>
<td>habilitation or rehabilitation education</td>
</tr>
<tr>
<td>confined to a wheelchair</td>
<td>their name</td>
</tr>
<tr>
<td>epileptic</td>
<td>person with epilepsy</td>
</tr>
</tbody>
</table>

### Table 10-20. Suggested disability etiquette rules

**General**

- Offering help is polite, but wait to see if it is accepted. Do not just grab someone's arm, for instance. This could even throw them off balance.
 Acknowledge a disability, but do not ask personal questions.

 Talk to the person with a disability, not to the person's interpreter or assistant.

 Do not park in spaces reserved for those with disabilities.

 Do not automatically treat a person with a disability as if he or she is unhealthy.

 Do not assume that a lack of response is rude.

 Remember that people with disabilities have the same daily activities as others.

 Be patient, polite, and considerate; you may have a disability some day, too.

 Treat each person as an individual. All hearing impaired people, for instance, do not have the same needs or behave the same.

 Some disabilities are less apparent than are others. Be flexible and open in your interactions with other people, until you get to know them, and their abilities, better.

 (continued)

Table 10-20. Suggested disability etiquette rules

Wheelchair Users

 Do not hold onto the chair or lean on it.

 Feel free to use words like "walking" or "running." They do, too.

 Avoid barriers to access when selecting a restaurant for a meeting, for instance.

 Sit down, if possible, so they do not have to look upward constantly.

 If asked to assist on stairs, be sure to keep the chair tilted back slightly.

 If assisting on a ramp, maintain hold of the chair handles.

Deaf or Hearing Impaired

 Speak clearly and distinctly, but do not slow down unless asked to.

 Do not cover your mouth.

 Use a normal volume, unless asked to speak louder. Do not shout.

 Speak directly to the person, not the interpreter, and position yourself in front.

 Use facial expressions, gestures, and body movement.

 Ask the person to repeat what he or she said, if needed, or use a pen and paper.

 Use sign language, if you know any.
• Do not stand in front of a window or bright light; the person will not be able to see your lips and face.

• Be flexible in your vocabulary. Some words are more easily confused with others.

### Blind or Visually Impaired

• Do not raise your voice or shout. Even total blindness does not affect hearing.

• Use terms like, “See you later” if you want.

• Give specific directions that do not include visual landmarks. Use “left” and “right” as directions.

  - If assisting movement, walk alongside and slightly ahead. Let the person hold your arm; do not grab his or hers.

  - Avoid revolving doors or escalators when walking with a visually impaired person.

  - Guide the person's hand to a banister railing at a stairway. Help the person locate a seat back in auditorium seating or on the back of a chair.

  - Do not leave the person alone in an open area. Provide reference points, such as walls, furniture, or doors.

  - Do not leave the person alone in a crowd. Announce your departure.

  - Do not pet a guide dog, unless the owner invites you to do so.

  - If meeting for the first time, introduce yourself. If you've met previously, refresh the person's memory.

### Mental Retardation

• Keep your concepts clear and concise.

• Remember, they are probably not sick and you will not “catch” mental retardation.

• Do not take advantage of what may appear to be an eager-to-please attitude.

• Provide the same service and access that others enjoy. They have the same daily responsibilities as others.

• They may respond slowly, or not at all. Do not assume they are rude. Do not finish their sentences for them.

• Treat adults with mental retardation as adults. They are not children; do not patronize them.

### WHERE TO GET HELP

There are various sources of help available for disability-related problems. Sources mentioned earlier
In this chapter are listed here for your convenience. Each disability problem has a national organization that can provide information.

One of the federal agencies that funds regional projects is the National Institute for Disability and Rehabilitation Research (NIDRR) in the US Department of Education. Its ten Regional Disability and Business Accommodation Centers (or Disability and Business Technical Assistance Centers) provide information, training, and technical assistance to businesses and agencies under ADA.

- National Institute for Disability and Rehabilitation Research
- Clearinghouse on Disability Information
- US Department of Education
- Room 3132, Switzer Building
- Washington, DC 20202
- Phone: (800) 949-4232 (Voice or TDD)

Other Federal agencies involved with the ADA are listed below:

- Equal Employment Opportunity Commission
  1801 L Street, NW
  Washington, DC 20507
  Phone: (202) 663-4900
- Equal Employment Opportunity Commission
  Publications Information Center
  Post Office Box 12549
  Cincinnati, OH 45212-0549
  Phone: (800) 669-3362 (Voice)
  (800) 800-3302 (TDD)

- US Department of Justice
  Civil Rights Division
  Post Office Box 66738
  Washington, DC 20035-6738
  Phone: (202) 514-0301 (Voice)
  (202) 514-0383 (TTY)

- US Architectural and Transportation Barriers Compliance Board
  1331 F Street, NW, Suite 1000
  Washington, DC 20004-1111
  Phone: (800) 872-2253 (Voice/TTY)

- US Department of Transportation
  Federal Transit Administration
  400 7th Street, SW
  Washington, DC 20590

For Information–Office of Regional Operations, TGM-30
Phone: (202) 366-1656 (Voice)
At least one trade association promotes safe and accessible product design. It provides information and education, promotes safe design, establishes standards, and maintains communications among those interested in safer and more accessible products.

Association for Safe and Accessible Products
1511 K Street, NW, Suite 600
Washington, DC 20005
Phone: (202) 347-8200
Fax: (202) 393-5043

For legal, technical, and practical advice to employers on disabilities and accommodations from a private, nonprofit group contact:

Mainstream, Inc.
1030 15th St. NW, Suite 1010
Washington, DC 20005
Phone: (202) 898-1400

Each state has a department, or several, set up to deal with disabilities, accommodations, and compliance. Contact your state departments of labor, education, or enforcement for specific information.

FURTHER READING
The following materials provide additional information to help you accommodate those with disabilities. They may or may not have been referred to in the chapter. They are listed, alphabetically, by author. Probably the quickest and cheapest way of creating and updating a library of information on ADA is to contact your regional Disability and Business Technical Assistance Center. Request their publications list. Remember, most disability publications are available in various formats, media, and languages. Select the most appropriate for your needs.


**EXAMPLE SCENARIOS**

The scenarios below represent some typical tasks related to disabilities that one can expect to encounter in the workplace. The purpose of including these scenarios in the Guide is to demonstrate how the authors foresee the document being used. For each scenario, we describe how issues raised in the scenario can be resolved. There is usually more than one way to approach these issues, so responses given below represent only one path that users of the Guide might take.

As a general rule, always start to look for information by using the Search function. There will be instances that you already know where required information is located. However, unless you frequently use specific sections of the Guide, you might miss information pertaining to the same issue located in more than one chapter. The Search will allow you to quickly search all chapters simultaneously.

**Scenario 1 - Americans with Disability Act**

Now that you are the official Disability Coordinator for your organization, you want to find out about the Americans with Disabilities Act and how it applies to you.

**Issues**

1. How does it affect your company?
2. When does it become effective?
3. What major issues does the ADA address?

**Responses**

All of the issues in this scenario are addressed in the INTRODUCTION and BACKGROUND sections.

1. If your organization has more than 15 employees, the ADA probably applies to you, so you better

3. Title I relates to employment issues such as hiring, training, benefits, and other policies and practices. Title II prohibits discrimination against those with disabilities who wish to use services funded by a state or local government. Title III prevents similar discrimination in the provision of goods and services or access to public or commercial facilities. Title IV regulates common carrier activities in the communications industry.

Scenario 2 - Attitude and Myths

One of your Line Leaders refuses to hire an otherwise-qualified mechanic because the applicant has several obvious disabilities. He says that people with disabilities have bad attitudes, they miss too much work, and they can't get their work done, so someone else has to do it, instead.

Issue

Are these general statements true?

Responses

Each of these statements is generally false (see Table 10-4). Most employers find those with disabilities to be good and productive employees. They may even be more healthy than the other employees and miss fewer days of work! If, in fact, they cannot perform the critical activities of a job (the "essential functions"), even with modifications and aids, the organization is not required to hire them.

Scenario 3 - Facility Design

You now realize that you have a lot of work to do to assure compliance with ADA. Most of your organization's facilities date back to W.W.II. (Yes, the second World War. There wasn't even any television back then. People had to entertain themselves listening to Big Band music. The development of "Boom Boxes" and CD players had to wait until bands got much smaller.)

Issue

What are the typical types of problems associated with facilities design and layout?

Response

Fret no more. Refer to Table 10-7. Facility problems occur almost always, and you'll probably conclude that the most common problem is getting people from their car to their workplace and then to other facilities in an organization (accessibility issues). Yes, people with disabilities do need to get to the break room, bathroom, and, even, the exercise room. So, this would be the first issue you would address.

Scenario 4 - Hiring

Late one Friday afternoon you have an interesting visitor. He is applying for one of the positions you have advertised in the local paper. He mentions during the interview that he has a poor employment history, which he attributes to his tendency since a child to set buildings on fire "accidentally." He is hoping to get this job because he needs to pay for a sex-change operation. As he leaves the interview,
you are surprised to see him casually slip your engraved name tag off your desk and into his purse, thus ruining your weekend.

*Issue*

What should you do? Do you have to hire this person?

*Response*

I don't think so! Table 10-8 in the REGULATORY REQUIREMENTS section lists various conditions excluded from protection under the ADA. Several of the conditions this individual mentions in the interview are listed in Table 10-8. Unless your state has a special program set up to guarantee employment to someone like Corporal Klinger from "MASH," you do not have to hire this person. This does not mean that you can't hire him, just that you are not required to hire him because of ADA.

*Scenario 5 - Getting Started*

Your boss says it is impossible to comply with the ADA. There are just too many types of disabilities, and they cost too much to accommodate. Furthermore, your boss does not know of any other organization that is in compliance, or even any way to get there from here.

*Issue*

Can you, once again, pick him up and get him back on the right path?

*Response*

Well, you could start with the Implementation and Compliance checklist in the GUIDELINES section. It lists several general activities you should undertake. These include reviewing and modifying the job application process, employee job descriptions (especially for entry-level jobs), employee testing policies and practices, any collective bargaining agreements, and the accessibility of your facilities.

Usually, local organizations concerned with disability issues can help you get started, for little cost. You can even involve your own employees who have disabilities or experience with them. There are several tax credits and incentive programs available to organizations to ease the process. Call the Job Accommodation Network for help with any tough problems you find. Finally, build a library of reference materials by contacting your regional Disability and Business Technical Assistance Center. Good luck!

**REFERENCES**

The following documents were referenced by number in this chapter:


17. Uniform Federal Accessibility Standards


