Stressors

Physical Stress

Conditions associated with the environment, such as temperature and humidity extremes, noise, vibration, and lack of oxygen.

Physiological Stress

Physical conditions, such as fatigue, lack of physical fitness, sleep loss, missed meals (leading to low blood sugar levels), and illness.

Psychological Stress

Social or emotional factors, such as a death in the family, a divorce, a sick child, or a demotion at work. This type of stress may also be related to mental workload, such as analyzing a problem, navigating an aircraft, or making decisions.

Figure 1-13. *Three types of stressors that can affect pilot performance.*

One way of exploring the subject of stress with a learner is to recognize when stress is affecting performance. If a learner seems distracted, or has a particularly difficult time accomplishing the tasks of the lesson, the instructor can query the learner. Was the learner uncomfortable or tired during the flight? Is there some stress in another aspect of the learner's life that may be causing a distraction? This may prompt the learner to evaluate how these factors affect performance and judgment. The instructor should also try to determine if there are aspects of pilot training that are causing excessive amounts of stress for the learner. For example, if the learner consistently makes a decision not to fly, even though weather briefings indicate favorable conditions, it may be due to apprehension regarding the lesson content. Stalls, landings, or an impending solo flight may cause concern. By explaining a specific maneuver in greater detail or offering some additional encouragement, the instructor may be able to alleviate some of the learner's stress.

To help learners manage the accumulation of life stresses and prevent stress overload, instructors can recommend several techniques. For example, including relaxation time in a busy schedule and maintaining a program of physical fitness can help reduce stress levels. Learning to manage time more effectively can help pilots avoid heavy pressures imposed by getting behind schedule and not meeting deadlines. While these pressures may exist in the workplace, learners may also experience the same type of stress regarding their flight training schedule. Instructors can advise learners to self-assess to determine their capabilities and limitations and then set realistic goals. In addition, avoiding stressful situations and encounters can help pilots cope with stress.

Use of Resources

To make informed decisions during flight operations, learners should be familiar with the resources found both inside and outside the flight deck. Since useful tools and sources of information may not always be readily apparent, learning to recognize these resources is an essential part of ADM training. Resources should not only be identified, but learners should also develop the skills to evaluate whether they have the time to use a particular resource and the impact that its use would have upon the safety of flight. For example, the assistance of ATC may be very useful if a pilot is lost. However, in an emergency situation when action needs be taken quickly, time may not be available to contact ATC immediately. During training, flight instructors can routinely point out resources to learners.

Internal Resources

Internal resources are found in the flight deck during flight. However, some of the most valuable internal resources include ingenuity, knowledge, and skill. Pilots can enhance flight deck resources by improving their own capabilities. This can be accomplished by pursuing additional training and by frequently reviewing flight information publications including the Aeronautical Information Manual (AIM), instruction manuals for on board equipment, and safety journals.