 Part II Reading Comprehension (Skimming and Scanning)(15 minutes) Directions: In this part, you will have 15 minutes to go over the passage quickly and answer the questions on Answer Sheet 1. For questions 1-7, mark Y (for YES) if the statement agrees with the information given in the passage. N (for NO) if the statement contradicts the information given in the passage. NG (for NOT GIVEN) if the information is not given in the passage. For questions 8-10, complete the sentences with the information given in the passage. Airplane Airplane Instruments Modern airplanes are complicated machines. Pilots need many gauges(量表) and electronic aids to help fly them. The flight deck of a large passenger plane contains many indicator dials and warning lights. One of the most important instruments is the altimeter, which tells the pilot how high the plane is off the ground. The air speed indicator measures the plane ’ s speed. The artificial horizon shows the position of the plane relative to the horizon. The turn and back indicator shows how much, if at all, the plane is turning and tilting. In dense clouds and fog, a pilot would not always know which way the plane is heading if it weren ’ t for this instrument. A gyrocompass(旋转罗盘)and various radio devices are necessary for navigation. Most large planes also have an automatic pilot. This is a device operated by a computer. It will fly the plane without the pilots touching the controls. These autopilots

can even control takeoffs and landings. The flight deck also contains many gauges and meters that tell the pilot whether the many pieces of equipment on the plane are operating properly. They measure fuel level, temperatures, cabin pressure, electric current, etc. Indicators show whether the landing gear is up or down. The radio equipment allows the pilot to talk to ground controllers and to receive navigation signals. Airplane Construction Early airplanes were made of wood frames covered by fabric and held in shape by wire. After World War I, airplane designers started to use lightweight metals like aluminum, titanium, and magnesium alloys. A thin skin of metal was riveted into place over metal ribs. Strong epoxy(环氧的) glues are now used for some joints, instead of rivets. As planes grew in size, they became heavier. More powerful engines were developed in order to fly the heavier planes. The use of metals brings with it a problem called metal fatigue. Stress and vibration in flight can cause metal parts eventually to break up. Airplanes must be constantly checked for signs of this trouble. Defective parts must be renewed by aircraft maintenance people. Designers test scale models in wind tunnels before the full sized planes are built. Reactions of the models to high speed air streams give good indications how full sized planes will react in flight. This approach helps save a lot of money. It also helps to make airplanes safe. 