Problem 13-18 (45 minutes)

1.	Contribution margin lost if the flight is discontinued		\$(12,950)
	Flight costs that can be avoided if the flight is		
	discontinued:		
	Flight promotion	\$ 750	
	Fuel for aircraft	5,800	
	Liability insurance $(1/3 \times \$4,200)$	1,400	
	Salaries, flight assistants	1,500	
	Overnight costs for flight crew and assistants	300	<u> </u>
	Net decrease in profits if the flight is discontinued		<u>\$ (3,200</u>)

The following costs are not relevant to the decision:

Cost	Reason
Salaries, flight crew	Fixed annual salaries, which will not change.
Depreciation of aircraft	Sunk cost.
Liability insurance (two-thirds)	Two-thirds of the liability insurance is unaffected by this decision.
Baggage loading and flight preparation	This is an allocated cost that will continue even if the flight is discontinued.

© The McGraw-Hill Companies, Inc., 2010. All rights reserved.

Problem 13-18 (continued)

Alternative Solution:

			Difference:
			Net
			Operating
			Income
	Keep the	Drop the	Increase or
	Flight	Flight	(Decrease)
Ticket revenue	\$14,000	\$0	\$(14,000)
Variable expenses	<u> 1,050</u>	0	<u> 1,050</u>
Contribution margin	<u>12,950</u>	0	<u>(12,950</u>)
Less flight expenses:			
Salaries, flight crew	1,800	1,800	0
Flight promotion	750	0	750
Depreciation of aircraft	1,550	1,550	0
Fuel for aircraft	5,800	0	5,800
Liability insurance	4,200	2,800	1,400
Salaries, flight assistants	1,500	0	1,500
Baggage loading and flight preparation	1,700	1,700	0
Overnight costs for flight crew and			
assistants at destination	<u> </u>	0	<u> </u>
Total flight expenses	17,600	7,850	9,750
Net operating loss	<u>\$ (4,650)</u>	<u>\$ (7,850)</u>	<u>\$ (3,200</u>)

2. The goal of increasing the seat occupancy could be obtained by eliminating flights with a lower-than-average seat occupancy. By eliminating these flights and keeping the flights with a higher-than-average seat occupancy, the overall average seat occupancy for the company as a whole would be improved. This could reduce profits in at least two ways. First, the flights that are eliminated could have contribution margins that exceed their avoidable costs (such as in the case of flight 482 in part 1). If so, then eliminating these flights would reduce the company's total contribution margin more than it would reduce total costs, and profits would decline. Second, these flights might be acting as "feeder" flights, bringing passengers to cities where connections to more profitable flights are made.