



Southampton Troop 58 Scout Justin Sinclair, Scout Greg Nanos, Mid Island Air Assistant Chief Pilot Gary Spence, Bob Howard, Scout Shane Sharkey, Southampton Pack 14 Cub Scout Will Howard, Scout Ben Howard, Tom Nanos, Tyler Sinclair and Scout Robert Terry.

BRENDAN O'REILLY

Scouts Explore the World of Aviation

Troop works to earn merit badges

By Brendan O'Reilly

On their way to earning their Aviation Merit Badges, Boy Scouts with Southampton Troop 58 made a trip to Brookhaven Airport on Sunday for a look inside the Mid Island Air Flight School with Assistant Chief Pilot Gary Spence.

Mr. Spence gave the Scouts a lesson not only in aviation history, but also on the math behind flying—including the weight and balance calculations required before takeoff to know if the plane can carry all the passengers—and the science behind it, such as 18th century Dutch-Swiss mathematician Daniel Bernoulli's principle that explains how a wing can lift a plane off the ground. To demonstrate Bernoulli's principle, Mr. Spence had each Scout blow on a sheet of paper and watch how the paper lifts up instead of bending down as the wind flows over it.

Once they knew how planes worked—reducing the pressure above the wings—they moved into Mid Island Air's hangar for a look at the inside of a single engine plane, and all its bells and whistles.

Pilots also need to be able to read the weather forecast to know if it's safe to fly, Mr. Spence told the scouts.

"We're not asking our pilots to be meteorologists," he said, "but you have to know more about the weather than, 'Hey, it looks like a nice day today.'"

Merit badges are awarded to Scouts who demonstrate knowledge and adeptness in a field of study. The Aviation Merit Badge is just one of 121 badges that Scouts may earn. Some badges are focused on life skills and others are

hobby and career oriented. The range of merit badge subjects spans from First Aid and Emergency Preparedness to Journalism and Genealogy.

Among many other requirements, Scouts must earn at least 21 merit badges if they wish to achieve the highest rank in Scouting, Eagle Scout. There are 11 mandatory merit badges needed to advance in rank, but the rest are electives, so Scouts may seek as many elective badges as they have time to earn before their 18th birthdays.

Aviation is one of the oldest merit badges in Scouting. It was created in 1911, the year after the Boy Scouts of America started. But the requirements for earning the badge have been updated many times since then, to reflect changes in technology.

The modern Aviation Merit Badge requirements including visiting an airport or aviation museum and learning the physics of flight and career opportunities.

Of all the airports on Long Island, including a few close to Southampton, Troop 58 chose to visit Mid Island Air at Brookhaven Airport, in Shirley, because one Scout, Justin Sinclair, has a connection there. He volunteered with History Flight last year when the organization visited Brookhaven Airport with a World War II-era Stearman biplane and T-6s. Passengers paid for a ride in the small planes and the proceeds went toward continuing History Flight's mission, searching for downed World War II planes and their lost crews.

Justin said he learned a great deal about planes while he volunteered for



Ben Howard and Shane Sharkey inside the cockpit.

History Flight and after that experience he'd like to be a small-plane pilot himself someday. He's in 10th grade at the Leonard E. Burket Christian School in Center Moriches and next year, once he is a junior, he'll be eligible for the Eastern Suffolk Board of Cooperative Educational Services aviation program.

Mr. Spence said many young flight students come through Mid Island Air with the BOCES program and they can earn their pilot's license for about a tenth of

the cost of paying for lessons privately. He noted that flight students can earn their solo pilot's license at age 16 and their private flying certificate at 17.

Justin was not the only Scout intrigued by the planes.

"I liked seeing all the different types of planes, what makes them different and how they work," said Scout Greg Nanos.

"Now I want to be a pilot," said Scout Shane Sharkey.