

The Southern New Jersey Professional Societies



Presents:

"A Critique of a Popular Aerodynamic Theory"

Michael Konyak, FAA ANG-E1 Lab Integration Lead

Mr. Konyak will present "Lifting line theory" which is a popular, 100-year-old aerodynamic theory that establishes a relationship between wing lift and associated drag. It is suitably simple for introduction in an undergraduate aerodynamics course, its lift-drag force relationship correlates well with measured results, and every aerodynamics text teaches it. It is also used as the basis for empirical corrections in aircraft design manuals. However, its assumptions about the physical flow environment deviate from wind tunnel observations to the point that validation of the theory involves a leap of faith in which the ends justify the means. In his presentation, Mr. Konyak critiques the theory, illustrates why it has endured, and presents concepts for an alternate approach that retains the same useful force relationship while better matching the physical flow environment of wind tunnel observations

Wednesday Apr 20, 2016

Call in your reservations by noon on Tuesday, Apr 19th

Blue Heron Pines Golf Club

550 Country Club Dr, Egg Harbor City, NJ 08215

(609) 965-1800 Check their website for directions:

www.blueheronpines.com

TIME: Social Time: **6:00 PM** Dinner: **6:30 PM** Speaker Approx: **7:45 PM**

MENU: Buffet style dinner

COST: \$17 AIAA/IEEE/INCOSE Members, \$21 ITEA/NSBE/HFES/Guests, \$13 Students

Reservations due by noon Tuesday, Apr 19th

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