

Region 3 Area 6 Report – Ron Ogan 15 October 2012

Alabama IEEE Section, Birmingham, AL <http://www.ieee-alabama.org>

The Alabama IEEE Section Chair is Mark Torres and the website <http://www.ieee-alabama.org> lists the other officers and meetings.

The Alabama Section has 5 active societies as listed below and a GOLD chapter. The Montgomery Sub-Section has been inactive for the last year.

Industry Applications

Geoff Clark 205-972-6430

ClarkG@bek.com

Robert Adams 205-972-6281

adamsr@bek.com

Communications Society

John Spencer 205-8630

hforsythe@ieee.org

Power Engineering

Ted Warren 205-257-3173

jtwarren@southernco.com

Steve Black 205-257-3351

sbblack@southernco.com

Engineering Management

Holin Crim 205-988-0042

gray@cs.ua.edu

Computer

Dr. Jeff Gray 205-348-2847

Huntsville, AL IEEE Section <http://www.ieee-huntsville.org/>

Bob Robinson, 2011 HSV Section Chair provides communication to active societies: Aerospace & Electronic Systems, Computer, Control Systems, JCAM-Joint Communications, AP and MTT, Electromagnetic Compatibility, and Technical Management Council. There are active student branches at Alabama A&M and the University of Alabama at Huntsville in addition to a GOLD Chapter. There are approximately 1400 members in the Huntsville Section with members being affected by the termination of the Space Shuttle flight end and planned cutbacks in defense spending.

Upcoming meeting on the next AESS sponsor presentation on a Kalman Filter application

Wednesday, October 24th, 2012

Dr. William D. Blair, Georgia Tech Research Institute

“Design of Nearly Constant Velocity Track Filters for Tracking Maneuvering Targets”

11:30am – 1:00pm

Location: Dynetics – Solutions Complex Main Conference Room

1004 Explorer Boulevard (in Research Park)

See map at: <http://www.dynetics.com/pdf/HuntsvilleAlabama.pdf>

Lunch will be provided to Attendees

RSVP to Charlene Neely (by COB on 10/22/2012) at: Charlene.Neely@dynetics.com
(Please send US Citizenship information with RSVP – YES or NO)

Bio: William Dale Blair, Ph.D., is a principal research engineer with GTRI and currently serves as the Technical Director for the C2BMC Knowledge Center of the Missile Defense Agency (MDA). Since joining GTRI in 1997, Dr. Blair has led a multi-organizational team in the development of multiplatform-multisensor-multitarget benchmarks to both air defense and ballistic missile defense. His projects at GTRI focus mostly the modeling and simulation and algorithm assessment associated with the sensor netting for the battle management, command, and control for the ballistic missile defense system.

Abstract: The design of Kalman filters for tracking maneuvering targets has been an open problem for more than 40 years. When tracking maneuvering targets with conventional algorithms, the process noise variance used in the Kalman filter is selected vaguely in relation to the maximum acceleration of the target. More recently, the process noise standard deviation for the nearly constant velocity Kalman filter was selected to be greater than one half the maximum acceleration of the target and less than the maximum acceleration. In the presentation, the deterministic tracking index is introduced and used to develop a relationship between the maximum acceleration of the target and the process noise variance that minimizes the maximum mean squared error (MMSE) in position

Mississippi IEEE Section <http://www.ieeems.org/>

The Mississippi IEEE Section website <http://www.ieeems.org/SectionMeetings> shows six evening Section meetings and 5 daytime/lunch meetings that have been held YTD. An all day seminar entitled the IEEE Mississippi Third Annual Engineering Professional Development Seminar was held at Jackson State University on June 22, 2012

The next Mississippi Section meeting will be held at the Civil Air Patrol, MS100 office at Hawkins Airport, Jackson MS on 18 October 2012. Speakers will be 1LT Dale Long, Commander, Colonel John Tilton, Lt. Colonel David Williams, MS Wing Chief Pilot <http://mswg.cap.gov/>

More than 60,000 CAP volunteer members in the United States support Homeland Security and Emergency Services by being keeping up-to-date with year-round professional development training opportunities and with aircraft equipped with the most advanced technologies available for search and rescue. Indeed, Civil Air Patrol makes a huge impact each and every day, going above and beyond to make a profound difference in America's communities by saving lives and protecting liberty for all.

Semper vigilans! (Always Vigilant) CAP programs include Emergency Services, Aerospace Education, Cadet programs for 12-17 years old and Senior Members.

At the IEEE Mississippi Section meeting on 20 Sept, Oscar Branch, ATC Instructor, Rankin Campus, Hinds Community College (www.hindscc.edu, Former FAA Administrator, presented an overview of the new Aviation Technology curriculum which detailed how Commercial Aviation and Aircraft Maintenance Technology are merging. Also, for the fall term, a new Unmanned Aerial Vehicle (UAV) Surveillance program has been added with instructor Dennis

Lott. Currently, UAVs require special certificates to fly in National Airspace which is controlled by the Federal Aviation Administration. The US Congress has a mandate to integrate UAVs flights with manned aircraft to support border surveillance and missions to support Homeland Security. UAVs are classified by weight and size ranging from a few pounds to over 1350 pounds such as the GlobalHawk with a 116 foot wingspan and gross weight of 22,000 pounds.

David Schoggen, Past MS IEEE Section Chair has started a "lunch and learn" meeting series. The monthly topics have included July 25, Contractor Safety by John Willion, P.E. Entergy; August 22, Project Management by Erica Aucoin, P.E. Supervisor, AM Program Design and Sept. 26, Engineering Ethics by David Schoggen, Energy Manager.

The IEEE Mississippi Third Annual Engineering Professional Development Seminar was held at Jackson State University on June 22, 2012 with these technology topics to provide professional training for IEEE members and guests. Overview of MS Home Land Security - presented by MS Office of Homeland Security ; Solar Power presented by Greater Jackson Solar Alliance ; Emergency Power - presented by by Cummins Mid South ; Electric Power Transmission System Protection and Relay Loadability - presented by Entergy ; DRIS (Disaster Response Intelligent System)- presented by JSU ; Design of Data Centers - presented by General Electric See <http://www.ieeems.org/> for complete details about past meetings.**Mobile, AL IEEE Section (remains inactive for the last 2 years)**

Dr. Mohammad S. Alam, Professor and Chair
Department of Electrical and Computer Engineering
University of South Alabama
150 Jaguar Dr., SH 4122
Mobile, AL 36688-0002

v: 251-460-6117
f: 251-460-6028
e: malam@southalabama.edu
www.southalabama.edu/engineering/ece/faculty/malam/

Mohammad: Thank you for agreeing to lead the Mobile, AL IEEE Section to serve the local membership.

Attached is the SAMIEEE that was extracted today (10-15) showing that there are 241 active members in your Mobile, AL IEEE Section.

I believe that there are exciting times ahead for Mobile, AL with engineering opportunities developing at EADS (Airbus)

http://www.eadsnorthamerica.com/north-america/usa/en/about-us/where-we-operate-in-the-us/where_we_operate/continent_north_america/country_usa/city_mobile.html

Airbus Military North America Spares and Support

8100 Airbus Military Drive

Mobile, Alabama 36608

USA

T : +1 251-338-0700

F : +1 251-338-0800

Inaugurated in October 2009, Airbus Military North America's maintenance, repair and overhaul delivery center at the Mobile Regional Airport supports its family of tactical multi-mission aircraft. The 30,000 square-foot facility provides North American operators of the C-212 and CN-235 tactical transports with the capabilities of a certified FAA Repair Station, as well as direct support from Airbus. The C-212 and CN-235 are used by a variety of military and civil operators, including the U.S. Coast Guard.

Airbus Americas Engineering

1801 S. Broad Street

Mobile, Alabama 36615

USA

T : +1 251-434-7200

F : +1 251-434-7203

Officially opened in February 2007, the Airbus Americas Engineering facility in Mobile, Alabama is responsible for various interior elements of Airbus' newest aircraft, the A350 XWB - including design and engineering work on its cabin, crew rest, lavatories and galleys.

Mobile, AL is well situated to engage in the Gulf Coast Aerospace Corridor projects.

<http://gulfcoastaerospacecorridor.com/>

Respectively Submitted by

Ron Ogan

IEEE Region 3 area 6 Chair

rtogan@ieee.org cell 972-672-0237