Vol.20, No. 1
March 2017

Flight Physician

A publication of the Civil Aviation Medical Association

In this issue:

****

Civil Aviation Medical Association
(CAMA) Contact Information

Mailing Address:
CAMA
P. O. Box 2382
Peachtree City, GA 30269

Telephone: 770-487-0100
Secure FAX: 770-487-0080

Email: civilavmed@aol.com
Web Site: www.civilavmed.org
Facebook : Civil Aviation Medical Association

FAA BasicMed Will Launch May 1

The much anticipated alternative medical certification pathway for private pilots is scheduled to launch on May 1, 2017 after a long legislative battle that saw the program evolve from a concept of not-for-hire pilots flying very light aircraft with only a valid state driver's license to the current program which will allow for operation of much larger aircraft (up to 6,000 pounds) and up to six occupants but require a physical exam and medication review by a state-licensed physician, as well as completion of an electronic educational course covering aspects of medical readiness.

Signed into law on July 15, 2016, as a part of the FAA Extension, Safety and Security Act (FESSA) of 2016, the new program has been dubbed, "FAA BasicMed." It has been viewed as a way to encourage more general aviation pilots to enter or return to participation in recreational or other not-for-hire activities, and attempts to address claims that the length of time for FAA aeromedical decision making limited some pilots in their ability to pursue flying. Pilots would be eligible to operate aircraft of up to 6,000 pounds at an altitude of up to 18,000 feet MSL at a speed of up to 250 knots in instrument flight rule (IFR) conditions, and could carry up to five passengers.

The new program will incorporate a detailed physical exam checklist that emulates the items found in the FAA medical application form (FAA Form 8500-8). Pilots are asked to approach their treating physician to have them perform the examination, and to review all medications the airman is taking (prescription and non-prescription) and sign an attestation statement that they have reviewed all medical data, performed a comprehensive examination, and reviewed medications for any condition that may affect aviation safety. The physician will be required to report their medical license number, date of examination, and office address and contact information. There is no requirement for the pilot to have an FAA-designated aviation medical examiner (AME) perform the comprehensive examination. For certain conditions such as neurological, psychiatric, and cardiac illnesses, the physician will have to certify that they are caring for the pilot for their specific condition. The health review will be required every four years, but will be mandated at every two years for airmen with the specific neurological, psychiatric, substance abuse, or cardiac conditions.

All pilots pursuing this pathway to medical certification will be required to take an educational course covering six modules on pilot medical readiness to fly, the importance of medical fitness and

(Continued on Page 2)

prevention, and what happens if a medical condition arises that may jeopardize the ability to safely operate an aircraft. Courses have been approved by the FAA and will feature one available from the Aircraft Owners and Pilots Association as well as one from Mayo Clinic. Pilots will be allowed to select which course they wish to take and are mandated to enter their pilot certificate number and demographic information as well as the information on the physician who performed their physical examination. Once completed, the course will generate a certificate of completion that the pilot must retain in their logbook.

"The new program involves significant changes for participating pilots, AMEs, treating physicians, and the FAA," explained Clayton T. Cowl, MD, MS, President of the Civil Aviation Medical Association. "Educating each group about the requirements, the liabilities, and the need to perform a quality examination will be critical to ensuring equivalent or improved aviation safety."

In response to the call for more education, the CAMA Board of Directors has initiated a communication plan that will inform physician societies and associations across the country about FAA BasicMed, provide details to share with their memberships, and offer to serve as a resource for future questions.

Many CAMA members have decided not to participate in performing the FAA BasicMed physical examination and medication review. A straw poll of board members at its winter meeting showed more than 90% did not plan to perform the examinations. Part of this has to do with perceived liability, but also the fact that for many pilots, the new program does not provide a certification "advantage." For example, pilots younger than age 40 without any significant medical condition would be eligible for a five-year certificate if they elect to undergo a standard Class III medical – as opposed to 4 years under FAA BasicMed.

CAMA LUNCHEON / AEROSPACE MEDICAL ASSOCIATION
GRAND BALLROOM 2

MONDAY, MAY 1, 2017

SHERATON DOWNTOWN DENVER HOTEL
DENVER, COLORADO

KEYNOTE PRESENTATION

Russell B. Rayman, MD, MPH, DAvMed, Colonel (Ret)
USAF, Arlington, VA

12:00 PM to 01:30 PM **"Operation New Life: Vietnam Rescue"**

NOTE: This Live activity, Civil Aviation Medical Association (CAMA) Luncheon, with a beginning date of 05/01/2017, has been reviewed and is acceptable for up to 1.25 Prescribed credit(s) by the American Academy of Family Physicians. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Will FAA BasicMed Change Your Practice?

The countdown is on for the launch of FAA BasicMed, a new alternative medical certification pathway for private pilots. In the days following the May 1, 2017 start date, the new program likely will have profound effects on the FAA aeromedical certification process, and downstream effects that may permanently impact aviation medical examiners (AMEs) across the nation.

Will FAA BasicMed affect the vitality of the population of currently designated AMEs?

Many AMEs estimate that the demand for flight physicals from private pilots will decrease significantly. Although many pilots will pursue standard Class III medical certificates, there will be a reduction in some practices up to one-third or more in many communities. More importantly, the BasicMed legislation has inferred, intended or not, that the skills of the FAA medical examiner are not valued since pilots can undergo examinations by any state-licensed physician with literally no training in Aviation Medicine or even familiarity with FAA regulations. For physicians considering becoming designated as an FAA aeromedical examiner there is now little or no incentive to do so. Taking a week away from a practice and one's family, pay travel to Oklahoma City to complete the FAA AME training course and pass an examination to become an AME -- and then undergo an audit to ensure they have proper equipment to serve as an examiner becomes more sobering with the knowledge that the intended use of the training will be in less demand. With the average age of the AME currently at 63 years of age, refreshing the corps of AMEs to serve not only private aviators but also professional pilots will become even more challenging for the FAA in the months ahead.

Who will use FAA BasicMed?

Unfortunately, the most likely pilots to utilize FAA BasicMed are airmen with significant medical conditions who actually would benefit from appropriate forensic scrutiny. Healthy pilots with minimal or no medical diagnoses will obtain certification for longer periods of time (5 years versus 4 years) if they are younger than age 40 using the standard Class III medical application process. Most will realize that it will actually take less time and require less paperwork than using the FAA BasicMed program. Many will be frustrated to find out that nurse practitioners and physician assistants will not be able to sign off on the medical examination checklist, and that many physicians will be unwilling to sign the attestation statement that certifies that they believe the pilot is medically safe to operate an aircraft due to perceived liability risks. They may also be precluded from signing off on the forms by their medical malpractice insurers or risk managers.

How will you prepare your practice for the FAA BasicMed launch?

Regardless of the size of your practice, the proportion of your total patient volume made up of pilots, or your complexity of case load, it is important to step back and reflect on how to maintain the highest quality standards for each aviator you evaluate. Each AME will need to establish their own talking points as calls and questions from pilots will inevitably arise. Now is the time to ensure your staff is educated, you have reviewed the FAA BasicMed medical checklist with your insurers and liability mitigation advisors, and decide how you and/or colleagues in your practice will respond to requests to complete the FAA BasicMed forms. In addition, it is likely that non-AME colleagues or other medical providers will have questions about how BasicMed works, what FAA regulations are applicable, and if they need to screen for certain conditions, such as color vision and field of vision (they do per the checklist).

Each AME needs to speak up and explain the importance of pilots seeing a designated and certified AME as part of upholding aviation safety. Write letters, articles, and blogs to local media and public information sources to advise of the upcoming changes. Offer to speak to local flying clubs or other organizations to review the rules of FAA BasicMed and be a resource for educating other medical providers who will be asked to participate in the new program. Our role as examiners is to not only remain excellent clinicians but also effective educators.

Clayton T. Cowl, MD, MS is CAMA President and serves as the Chairman of the Division of Preventive, Occupational & Aerospace Medicine at Mayo Clinic in Rochester, Minnesota. He is an FAA Senior Aviation Medical Examiner, a pulmonologist, and altitude physiology researcher.

CAMA SUNDAY / AEROSPACE MEDICAL ASSOCIATION
PLAZA BALLROOM D

SUNDAY, APRIL 30, 2017

SHERATON DOWNTOWN DENVER HOTEL
DENVER, COLORADO

AIRCREW NEUROCOGNITIVE ASSESSMENT

The Gold Standard: Laboratory or Simulator

08:00 AM to 08:10 AM	**Introduction**
08:10 AM to 08:50 AM	**Neurocognitive Assessment: FAA Perspective** *Speakers: To be Announced* *Federal Aviation Administration* *Office of Aerospace Medicine* *United States*
08:50 AM to 09:30 AM	**Neurocognitive Assessment: UK Perspective** Dr. Michael D. O'Brien Consultant Neurologist, Civil Aviation Authority, UK Sallie Baxendale, PhD Consultant Clinical Psychologist National Hospital for Neurology and Neurosurgery Queen Square, London, UK Dr. Stuart J. Mitchell Head, Medical Section Civil Aviation Authority, United Kingdom
09:30 AM to 10:10 AM	**Neurocognitive Assessment: Neurologic Perspective** Jack D. Hastings, MD Neurology and Aerospace Medicine United States
10:10 AM to 10:25 AM	**Break**
10:25 AM to 11:05 AM	**Laboratory-Derived Neuropsychological Assessment** Max Trenerry, PhD, LP, ABPP, CN Neuropsychology, Mayo Clinic, Rochester, Minnesota United States
11:05 AM to 11:45 AM	**Neurocognitive Assessment: A View of Both Sides** TBA Airline Transport Pilot, Captain FAA Aircrew Program Designated Examiner Check Airman, Aircraft and Simulator United States
11:45 AM to 12:15 PM	**Panel Discussion**
12:15 PM	**Adjourn**

NOTE: This Live activity, Civil Aviation Medical Association (CAMA) Luncheon, with a beginning date of 04/29/2017, has been reviewed and is acceptable for up to 4.00 Prescribed credit(s) by the American Academy of Family Physicians. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

A Report on the 5th European Congress of Aerospace Medicine September 15-18, 2016

Dr. Lars Tjensvoll, President,
Norwegian Association of Aviation

Norway is a majestic northern land. Upon hearing its name, what comes immediately to mind are magnificent fjords, a warm and welcoming people, and a proud history and culture. Located in the southeast of Norway, the capital city of Oslo brings together not only the elements of a traditional sea-going folk, but also the character and qualities of a modern cosmopolitan metropolis.

Oslo also recently brought together some of the most respected global leaders in air and space medicine and human performance for a landmark conference. With 'Pushing the Limits of Aerospace Medicine Together" as its theme, the 5th European Congress of Aerospace Medicine (ECAM) was held in Oslo on September 15-18, 2016. The European Society of Aerospace Medicine (ESAM), holds the ECAM once every two years, and this was the 5th, coinciding with the organization's 10th anniversary. Jointly hosted by the European Society of Aerospace Medicine (ESAM), the Aerospace Medical Association (AsMA) and the Norwegian Association of Aviation Medicine (NAAM), the 5th European Congress of Aerospace Medicine was the first such congress co-arranged by AsMA outside of North America!

The congress was held in the magnificent Holmenkollen Park Hotel, a modern conference hotel located in stunning surroundings perched 350 meters high atop mountains overlooking Oslo and the surrounding fjords and close to the famous Holmenkollen ski jump. This high altitude venue was the perfect meeting place for the more than 400 military and civilian physicians (primarily flight surgeons and aeromedical examiners), scientists, medical service personnel and aviators attending.

The three days of the meeting were opened in Oslo's historic City Hall, where congress attendees a reception hosted by Oslo's Mayor. Attendees also were able to see the wealth of artwork adorning the walls of this grand structure, wherein the history of Norway was depicted in stark beauty.

The congress itself was designed to be a forum of presentations and open discussions. The program was presented by a host of distinguished invited internationally respected aerospace medical specialists presenting their work either as lectures or posters. There was also a General assembly meeting of ESAM as well as a Norwegian CMO/AME training session.

The five themes of the scientific program were designed to challenge some of the commonly held beliefs and even misconceptions associated with aerospace medicine and human performance. The topics were timely and in some cases, controversial.

The first session of the congress, **'Why have a pilot?'**, posed the question as to whether the human being is always the weak link in a safety management system. Presentations and discussions addressed the medical and human performance factors related to pilot performance and aviation mishaps. Norwegian Air Force retired General Stein Erik Nodeland presented the keynote address of this session, noting the critical roles of aerospace medicine and human factors in today's increasingly complex aerospace market. Other presentations during this session addressed diverse issues including spatial disorientation, the need for commercial air transport crews, the medical requirements for unmanned vehicle operators, workload and stress.

During a session with the intriguing title, '**It is too Cold Outside for Angels to Fly'**, speakers discussed the many and varied impacts of extreme cold on aircrew and ground support personnel survival, health and performance. One of the presenters during this session was Mr. Borge Ousland, a world famous Norwegian Polar explorer (first to go to both the North and South pole alone and unsupported) provided a fascinating first-hand account of the challenges to human physiology and psychology of polar exploration.

The second day of the congress started with an extremely timely and at times controversial topic,

entitled '**Mad, bad or just dangerous to know: Aerospace Specialists and Mental Health.'** This session covered many of the aspects brought to light following the German Wings tragedy in Europe. Presenters during this session made clear the importance of monitoring aircrew psychological health and needs. Amongst these, session Keynote speaker Dr. Kevin Herbert reviewed the problems related to the balance between medical confidentiality and public safety that were highlighted in the German Wings enquiry, and considered the methods by which a relationship of trust can exist. The other presentations during this session noted the criticality of establishing close collaboration between pilot representatives, medical specialists and aviation psychologists in areas such as the nature and scope of psychological evaluations, diagnosis of emotional issues and per support

In keeping with this theme, the afternoon topic '**Does regulation make a difference in Aerospace Medicine?**' focused on the medical regulatory activities in Europe following the German Wings tragedy. Topics during this session included mental health assessments and screening, personal issues impacting crew mental health, the results of a Mayo Clinic international survey on these issues and the creation of a mental health working group to further explore these issues. Session Keynote speaker, Dr. Michael Berry (Deputy Federal Air Surgeon, Office of Aerospace Medicine, FAA) reviewed a number of initiatives in the US which challenge the concept of routine medical screening of aviators. The concept of 'low risk' was discussed in some detail.

The final day of the congress was devoted to the many medical and performance challenges facing those who will crew craft outside of Earth's atmosphere. With the title, '**Commercial Space Travel. Really**?', this session brought together specialists in Space Medicine who examined issues such as exposure to radiation, physical conditioning, changes to bone mass and possible medical anomalies associated with long duration space flight, including the manned exploration of Mars. Dr. Joan Vernikos, asked attendees to consider the potential fiscal, physical and human costs associated with commercial space travel. Dr. Ries Simons covered the history of commercial space travel to date and brought to light some of the human factors which may be an impediment to it in the future. It was Dr. Ries' presentation that brought this 5th ECAM to a close.

It was an historic occasion indeed that brought together such a group of distinguished aerospace medicine and human performance specialists from around the globe, all gathered for an all-too-short three days in Oslo to better understand the plethora of issues that have and will continue to challenge those who both travel and support travelers in air and space. This jointly sponsored meeting of the European Society of Aerospace Medicine, Norwegian Association of Aerospace Medicine and the Aerospace Medical Association proved to be an excellent way for global professionals to come together and share personal experiences, the latest research findings and discuss/debate some of the most pressing and timely topics in the fields of aviation and space medicine and human performance.

Flight Physician

A publication of the Civil Aviation Medical Association (CAMA)

Civil Aviation Medical Association

The editor of The Flight Physician welcomes submission of articles, letters to the Editor, news items, interesting aeromedical cases, and photographs for publication. Please email items to:

Sherry Sandoval
civilavmed@aol.com

Message from CAMA Executive Vice President David P. Millett, M D, MPH:

We begin 2017 with 47 Life Members and 110 regular members who have renewed their memberships. To date in 2017, we have two new Life Members—Dr. Sanjeev Batra of Roseville, CA, and Dr. Daljeet Kimberley Chawla, from India. We also welcome the Aviation Medicine Advisory Service (AMAS) as our newest corporate member. If you have not yet renewed your CAMA membership for 2017, please complete the form on Page 19 of this publication and return it to the CAMA Home Office as soon as possible. We accept VISA, MasterCard, American Express, and checks.

Dr. Jack Hastings has put together a wonderful CAMA Sunday program entitled "Aircrew Neurocognitive Assessment—The Gold Standard: Laboratory or Simulator?" Dr. Russell Rayman will give the key-note presentation at the CAMA Luncheon. His presentation is entitled "Operation New Life: Vietnam Rescue." The programs have been rated by the AAFP for a combined 5.25 Prescribed credits of CME. Please share this information with anyone who will be at the AsMA annual meeting.

Plans are well underway for the 2017 Annual Scientific Meeting at the Sheraton Greensboro at Four Seasons in Greensboro, NC. The meeting dates are September 14-16, 2017. Registration will open in early May, and we will email to CAMA members the meeting registration packets and the link to make hotel reservations at the Sheraton.

Hotel arrangements for the 2018 Annual Scientific Meeting being held September 27-29, 2018, at the Captain Cook Hotel in Anchorage, Alaska, have been finalized, and field trip plans are in progress. In the works are a spouses' tour of the fur vault of David Green and Sons Furriers and a luncheon fashion show. Please annotate your calendars to attend both the 2017 and 2018 meetings.

The CAMA hospitality table during the AsMA Annual Scientific Meeting in Denver, April 30—May 4 will be manned by Sherry Sandoval and Lisa Mooring. They will be available to process dues renewals and new memberships, so please drop by and tell them hello! I will miss this year's AsMA meeting, but hope to see everyone at the 2018 AsMA meeting in Dallas.

Remember, CAMA has a page on Facebook where we post items of interest, announcements, photos, programs, etc. You are invited to "Like" the page so that you will receive notification when anything new is posted and to make comments on the content or to post photos or other items pertaining to the organization or its members. The CAMA Sunday and CAMA Luncheon programs are currently posted. Search under "Civil Aviation Medical Association" to find the CAMA page. The content is closely monitored, and any inappropriate material will be deleted.

In December, the CAMA Home Office was adopted by a feisty young orange and white cat. Although christened Noelle, she is most often known as "Stop That!" "Get Down" "What Are You Doing?" or "Nosy Rosy." Bent blinds, scattered toy mice, bottle caps, balls, and treats now grace the halls of the CAMA office, and everything now requires "cat help," as aptly demonstrated in this photo:

HAROLD N. WALGREN, MD, JD, LLM

Dr. Walgren and his son Scott

Obituary copied from Thompson Funeral Chapel, Litchfield Park, AZ. Link to original write-up: http://www.thompsonfuneralchapel.com/obituaries/

Dr. Harold N. Walgren MD, JD, LLM, was born in Belvidere, Illinois to Dr. Roy and Stella Walgren on March 27, 1935. He passed away February 5, 2017. He is survived by his wife Leanne, who he met while in high school and later attended the University of Colorado in Boulder together. He went on to medical school at the University of Illinois-Chicago. They married in 1958, and upon completion of medical school moved from the medical center in Chicago to Hinsdale, Illinois where they lived for 25 years, working and raising their family of three sons and a daughter, all of whom attended and graduated from the University of Colorado, Boulder. In 1985 they moved to Boulder City, Nevada and subsequently settled in Litchfield Park in 1988.

Dr. Walgren's academic degrees include a BS (Med) and M.D. from the University of Illinois, as well as a J.D. and LLM from John Marshall Law School of Chicago. He was Board Certified by the American Board of Radiology and the American Board of Legal Medicine. Dr. Walgren was a member of the Illinois Bar and licensed in Medicine in Illinois, Nevada and Arizona. Numerous professional memberships were held including the AMA and the ABA. He was a Fellow of the American College of Legal Medicine, a Fellow of the Aerospace Medical Association, past president of the Civil Aviation Medical Association, past president of the DuPage County, IL Medical Association, and a past Trustee of the Flying Physicians Association. He was an active Rotarian, a past president of the Estrella Rotary Club, a Paul Harris Fellow and devoted to the Rotary Foundation.

Dr. Walgren's military career consisted of over 33 years as a commissioned officer with the USAF, serving with the Illinois Air National Guard and on Active Duty at Luke AFB, retiring in 1995 with the rank of Colonel. His rating was Chief Flight Surgeon having completed 2262 hours of military flight time.

Dr. Walgren was a Senior Aviation Medical Examiner for the FAA and a private pilot with commercial license, instrument, multi-engine, and seaplane ratings. His private flying time totals were over 3500 hours.

Hal Walgren lived a life devoted to his wife, his family, his church, his practice and the community and nation he loved. He was a firm believer in life-long learning, higher education and the pursuit of excellence. He enjoyed target shooting, hunting, fishing, ham radio, flying and especially being a doctor to the pilots he so respected. He will be sorely missed and treasured in spirit. He was preceded in death by his parents; brothers, Robert, Kenneth and Alan; and grandson Corey Walgren. He is survived by his wife, Leanne; daughter, Kimberly Marzullo (Bob); sons, Scott (Chris), Doug (Maureen), and Brad (Victoria) Walgren; and seven grandchildren.

In lieu of flowers donations may be made to the Rotary Foundation, 1560 Sherman Avenue, Evanston, IL 60201-3698 or The Church at Litchfield Park, 300 N. Old Litchfield Rd, Litchfield Park, AZ 85340.

****

Dr. Walgren was a beloved and valued Life Member and Sustaining Member of the Civil Aviation Medical Association, serving as a Trustee on the Executive Board for various terms and as President of the organization 1978 and 1979. His calm demeanor, quiet sense of humor, and trusted advice will be missed by all the officers and members of CAMA.

Dr. Walgren at the CAMA Board Meeting in Rochester, Minnesota, September 2016

Dr. Walgren at the Hormel Heritage House during the CAMA field trip September 2016

Dr. Walgren and Family

(*Continued Page 9*)

In Memorium: Harold N. Walgren MD, JD, LLM

In an email, Dr. Harold Walgren's daughter, Kim Marzullo, expressed the following to CAMA and CAMA members who know and worked with Dr. Walgren:

"You and the others will be pleased to know there were many pilots at his service (especially Southwest Airlines pilots and AF). Full military honors were bestowed and a powerful fly over with missing man formation was conducted prior to the start of his service. All of the pilots flying the formation were patients of his.

He loved aviation and caring for pilots with a deep passion, and we know CAMA was very important to him. We all remember quite a few of your conferences where we were allowed to tag along.

Of the four kids (3 boys and me), it was I, ironically, who became a pilot (tail draggers) and healthcare provider (registered nurse). I think he always got a secret giggle out of that. Dad and I had one last flight together on a King Air Air Ambulance before he went into hospice. He didn't say much, but I know the sights, sounds and smells of a well loved aircraft were soothing to him as we returned from San Diego to Phoenix.

We are honored that he touched so many people and blessed so many have shared their memories and thoughts with us.

On behalf of my mother and whole family, please give our gratitude to all of CAMA for giving him a forum to share his passions of medicine and aviation. I will send photos and a video of the missing man fly over separately.

With gratitude,
Kim Marzullo and the Walgren Family"

Fever in the Returning Traveler

Richard S. Roth, MD, Infectious Disease Specialist, Savannah, GA, and Program Director of the Infectious Disease Training Program, Memorial Health University Medical Center, Mercer University School of Medicine. Dr. Roth is a Senior AME and holds both ATP and private pilot ratings. He serves as a Trustee on the CAMA Board of Directors

I'm clearly blessed to live in Savannah, Georgia, where spring is now starting to be in full bloom, although the calendar shows it's the last week of February. On the ride over to the office today, I passed hundreds of azaleas lining the roadways, albeit not paying attention to the yellow pollen which encrusts the majority of the cars sharing my morning commute.

Recently my wife Debra and I have been making a few runs via commercial airlines to assist my mother and father, now age 88 and 90 respectively, in their new assisted care environment. Unfortunately, we have also had the far from a pleasurable experience spending some time in international airports. Although the majority of travelers are domestic bound, there is clearly a significant percentage of international travelers coming in and out of the United States. The airmen whom we serve from a medical certification perspective are not immune to the contraction of travel borne diseases, although the literature is dominated by the passenger/traveling public.

I've had the pleasure and honor of providing updates regarding the prophylaxis for aviators and crew-members that may be traveling to potential high risk endemic pathogen geographic regions during one of our CAMA meetings a few years back. However, independent of prophylaxis received, some individuals still may present with severe illness on their return.

Without falling into the valley of the immigration topic which has dominated the news cycle lately, it is obvious that the diversity of the origin of these inbound travelers is quite impressive in regard to their distance and the potential endemic infectious disease pathogens that we must be aware of if one of these individuals were to present in the need of care with a febrile presentation.

Thus, in this issue's column, I intend to focus on the approach to fever in the returning traveler. This clinical presentation is not uncommon and frequently can present a challenge to those charged with their care.

Recent literature supports that 3 to 4% of individuals who have traveled abroad even for short periods present with a febrile illness on return, and close to 28% of individuals who present ill to a travel clinic have the primary complaint of fever. Although the percentage may be small, the International Tourism Organization reports that 1.2 billion trips abroad were accounted for in 2015 alone and has increased close to 5% per year.

As I've written in previous columns, certain highly transmissible causes of fever have presented a great challenge to the healthcare system—such as the 2015 Ebola epidemic in West Africa, the 2016 Zika outbreak in South America, and even the emergence of the Middle East Respiratory Syndrome-coronavirus complex (MERS-CoV).

Thus, fever in the returning traveler requires an expanded workup with attention being focused to the country of origin, as well as the current epidemiology of certain pathogenic agents dominating the patient's recent geographic exposure.

One approach to the febrile traveler could be to prompt a quick referral to an infectious disease subspecialist; however, online services have provided a significant clinical decision-making tool to assist the practitioner in the primary workup. Since 1995, the International Society of Travel Medicine and the CDC have contributed to web-based data in a central database. One successful example was the use of Healthmap, which successfully tracked the 2009 H1N1 global influenza outbreak. The Global Infectious Disease and Epidemiologic Network (GIDEON) have offered a commercial computer soft-ware algorithm to assist in the differential diagnosis in the clinical assessment of the returning febrile host.

The most important part of the primary decision analysis of the febrile traveler is to recognize potential life-threatening causes of fever first. Two decades of databases evaluated close to 4000 cases and found that 4% of those cases had potentially life-threatening tropical diseases, and fever was the primary symptom in 91% of those cases. More importantly, it was found that falciparum malaria accounted for 70% of those cases and enteric fever accounted for close to 20%. The malaria cases were predominantly from West Africa and the enteric fever trended to have epidemiology focused on the Indian subcontinent.

(*Continued on Page 11*)

(*Fever in the Returning Traveler, Continued*)

Certainly non-tropical (cosmopolitan) causes of fever are also common, such as respiratory and even urologic infections that are all too common sources of fever here in the general population of the United States.

During the initial assessment phase of these patients, the travel history should be the primary assessment tool to focus on infections from particular geographic regions, after a good physical exam and routine blood work test that may assist the practitioner. In obtaining a diagnosis, work-ups should quickly include the workup for malaria if deemed appropriate for the traveler's origin/ exposures. Malaria workups used to be much more complicated in regard to having individuals that were comfortable looking at blood smears; however, a new antigen testing chemical assay is widely available, known as a plasmodium/malaria-RDT (rapid diagnostic test), which almost all large hospitals offer, and if not available in-house, can be rapidly sent out to a specialty laboratory service. The exclusionary workup of malaria should be pursued even if the individual reports receiving oral chemo-prophylaxis. The rapid test is usually available in under an hour in-house, although I would also recommend thick and thin smears for malaria to be tested as well.

Transmissible pathogens also need to be approached in the febrile traveler in regard to viral infections that would warrant significant isolation, with attention being made to some of the lessons that were learned the hard way during the handling of Ebola cases back in 2015. Human-to-human transmission and subsequent nosocomial outbreaks through droplet or aerosol transmission warrant quick isolation of these individuals in negative airflow rooms, as well as appropriate healthcare personnel protective equipment to be donned, if appropriate, if specialty consultation may be delayed or pending further workup.

Healthcare workers involved in direct contact with patients with high risk viral infections or severe air-borne diseases should be refreshed on previous education about the use of personal protection materials, hand hygiene, footwear, face shields/ goggle devices, and appropriate mask filtration, such as the tuberculosis mask equivalent N95 level filtration. In-house infection control personnel should also be intimately involved to assist healthcare workers on following national guidelines for the highest risk scenarios.

The lower risk traveler with fever frequently can be worked up in the outpatient setting, and after routine blood work is done, such as a CBC and a chemistry profile, one can expand the serologic survey to include viral pathogens such as hepatitis A, B, or C, as well is even measles, chickenpox, Dengue or Yellow Fever, to name a few.

Empiric therapy of the more stable patient should be mostly supportive as we await definitive diagnostic results. However, broad-spectrum antibiotics are rarely indicated, but the use of doxycycline for atypical pathogens, and the use of quinolones for those presenting with diarrheal illnesses may be an adjuvant to the treatments pursued for such patients.

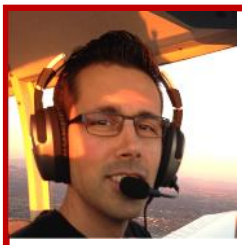
Stool studies for routine enteric bacterial pathogens should be performed in those with enteritis presentations, but one should also include Ova and Parasitic stool smears as well as stool studies for Giardia and Cryptosporidiosis.

In summary, the diagnostic algorithm after the initial assessment should focus on great attention to the country of origin/exposure of this individual and then continue down the algorithm outline, depending on the severity of the presentation of the indexed host. If the individual has had significant tropical exposure, life-threatening malaria should be ruled out, and even empiric therapy might have to be pursued as we await special studies. But one must not forget that routine (cosmopolitan) causes of fever in the returning traveler such as urinary infections or common respiratory infections may need empiric coverage as well. Chest radiographs may help in ruling out tuberculosis in the high risk traveler, but definitive respiratory sampling via sputum AFB smears would be appropriate, if tuberculosis were to be suspected.

Clearly, subspecialty consultation may be warranted in individuals where a quick diagnosis has not been achieved, and morbidity and fever has continued, or is potentially involving multiple systems. Even other patients that may have been in close contact with the index case must be considered.

Once again, the adjuvant of significant online resources bolstered by current print literature can serve as a great asset to any healthcare worker challenged with the workup of the febrile returning traveler.

Ref: NEJM 02/09/2017 vol. 376 #6, 505-604



Daniel Danczyk, MD, is a Senior Associate Consultant in the Psychiatry and Psychology Dept. at Mayo Clinic. He is the State Air Surgeon for the Minnesota Air National Guard, and was recently promoted to Colonel in the Air Force. If there is a particular subject you wish fof Dr. Danczyk to address, please notify the CAMA Home Office by email or by telephone.

The Montreal Cognitive Assessment: A (very) brief primer

I must confess when my nurse recently gave the Folstein Mini-Mental State[1] to a patient, I did a double take: The which…the what? The Folstein is so ubiquitous that I did not know it as the 'Folstein.' I matured as a medical student and resident learning it as 'The Mini Mental' – short for "Mini Mental Status Exam," or MMSE.

So, when a colleague of mine recently told me it could no longer be used without copyright permission, I did another double take: Huh? Looking back at various articles,[2,3] for example, makes me wonder if I was using it illegally. Granted, by the end of my third year of medical school years before that, I was administering the MMSE from memory.

I am not an intellectual property lawyer (thank God!), but I doubt there is any way to prosecute me for something I did not publish and only referenced as a double-digit numerical score in a HIPAA-protected document. Even one author[3] argues there is no chance a legal challenge to enforcing the copyright rule would stand up in court. I digress…

I believe it to be a moot point anyway, since I have not utilized the MMSE since my intern year. By the time I left the inpatient service completely and began my outpatient rotations, I quickly became familiar with the Montreal Cognitive Assessment (MoCA).[4] I learned this tool while performing weekly screening for relative mild cognitive impairment (MCI) of patients undergoing electroconvulsive treatment (ECT). That attending, along with my geropsychiatry attendings, favored it over the MMSE as more sensitive for picking up executive dysfunction.

While the statistics argue for less specificity with the MoCA (0.75 compared to the MMSE's 0.89), the sensitivity is better (0.89 compared to 0.81).[3] In practice, I would also agree with my residency attendings that the sensitivity is better with the MoCA. I continue to use the MoCA as a screening tool for anyone, of any age, I may have a concern regarding mild cognitive impairment. It is very easy to learn and administer. It also proves to be reassuring with a normal score to those with mild or even moderate anxiety or depression that have primary cognitive complaints.

The MoCA is useful in any clinical setting, and when compared to your interview and history, can help you decide very quickly whether formal neuropsychological testing is really warranted. Moreover, it is a great serial test to perform annually on older patients who are concerned about MCI. Fortunately, the MoCA is not under copyright, and comes in multiple versions so that patients do not recall the animal pictures or registration words very easily in serial administrations. Recalling five letters, instead of three as in the MMSE, along with the involved cueing, also has greater utility. This helps to flush out or differentiate working memory concerns in something like untreated depression compared to an organic brain injury or dementing process.

In conclusion, I encourage you to utilize the MoCA whenever clinically indicated. The MMSE, on the other hand, whether for copyright reasons or as a clinical screen, has gone by the way of the dodo! I hear that the FAA likes the MoCA as well ☺.

MoCA
MONTREAL
COGNITIVE ASSESSMENT

[1] *Folstein, M. F., Folstein, S. E., & Mchugh, P. R. (1975). "Mini-mental state". Journal of Psychiatric Research, 12(3), 189-198. doi:10.1016/0022-3956 (75)90026-6*

[2] *Newman, J. C., & Feldman, R. (2011). Copyright and Open Access at the Bedside. New England Journal of Medicine,365(26), 2447-2449. doi:10.1056/nejmp1110652*

[3] *Kristina Fiore Kristina Fiore. (2015, October 06). Copyright Issues Hinder MMSE Use. Retrieved February 23, 2017, from http://www.medpagetoday.com/Neurology/Dementia/52040*

[4] *http://www.mocatest.org/*

Special thanks to Steven I. Altchuler, MD, PhD, for contributing to this article.

AME Question Column

AVIATION CERTIFICATION SERVICES, LLC.
Warren S. Silberman, DO, MPH
President-Elect, CAMA
Vice-President of the
Long Range Planning Committee

NOTE: Please submit any AME-related questions you wish answered to civilavmed@aol.com for Dr. Silberman. Please indicate in your emailed question your city and state or city and country, and state whether or not you wish to have your real name used in the column. Dr. Silberman will answer your question in his column and may also contact you directly via email to provide a timely personal answer.

So, a 45 y/o pilot comes to your office wanting a second-class examination. He has not had an FAA examination in about a year since he was diagnosed with *ulcerative colitis (UC)*. The pilot provides a letter from his treating physician that he is currently in remission. He reports in Block 17.a. that he is taking Mesalamine and two Loperamide capsules average per day. The medications are corroborated by the treating physician's letter.

The FAA aeromedical folks want you to be able to use the online *Guide for Aviation Medical Examiners* to find out what you are to do for medical conditions as an AME. I am hoping that many of you already know what to do about this medical situation, but for the purpose of this article, I want to walk you through how it should be done.

You go to the FAA.gov website, and along the top you see the bar in lighter blue color that lists the various FAA organizations. When you pass your cursor over *Licenses & Certificates*, you see a dropdown box and see Medical Certification. Click on that link and you are taken to the page entitled **Guide for Aviation Medical Examiners**.

The FAA wants you to use either the *Applicant History* or the links to the *Aerospace Medical Dispositions, CACI Certification Worksheets,* or *Disease Protocols* to locate what they want you to do for a particular condition.

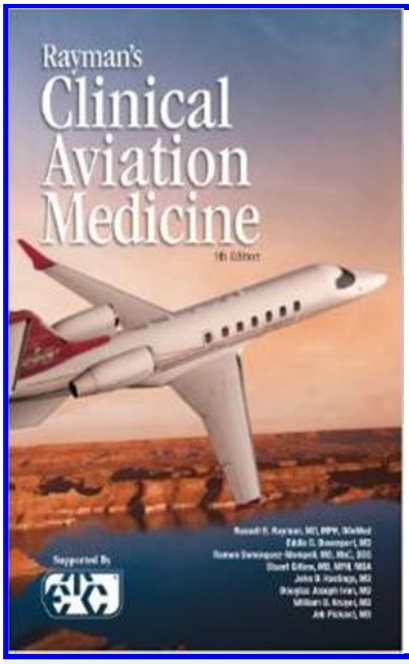
You know that UC is a gastrointestinal condition, so start by clicking on *Aerospace Medical Dispositions*. Clicking on that link, you are taken to the page that has the **Decision Considerations – Aerospace Medical Dispositions**. Here it lists all the portions of the FAA physical examination. Clicking on the link to #38: Abdomen and Viscera then takes you to the conditions listed under that subject. Clicking on the Abdomen and Viscera and Anus Conditions you are taken to a list of conditions, and there you see *Colitis*. That then takes you to the Disposition Chart, and under the topic of colitis, you see the Colitis CACI Worksheet. (If you knew that the condition Colitis is a CACI condition, you could have clicked on the link to the CACI worksheets back when you first gained entrance to the *guide*.)

Going down the list of items the AME must consider when you potentially have a pilot with this condition, you note that your airman currently has a favorable health status, complains of mild diarrhea, has UC, has not had any surgery, and is taking 2 of the acceptable medications (Mesalamine and Loperamide, only 4 mg total).

So, your airman is CACI qualified. You write the comments on your airman down in the "Stomach" comment box and then type *CACI qualified colitis* in Block 60.

That is how you should search to see what is required for a particular condition. You should know that not every condition is listed in the guide, so when you cannot locate a condition, it is time to call your Regional Flight Surgeon or AMCD.

Dr. Silberman at the Spam Museum in Austin, MN



RAYMAN'S CLINICAL AVIATION MEDICINE
5th Edition, 2013

CURRENTLY AVAILABLE FROM
THE CAMA HOME OFFICE!!

The 2013 fifth edition of "Rayman's Clinical Aviation Medicine" is a 485 page rewrite of the classic text. Seven physicians well experienced in aviation medicine provide aeromedical disposition guidelines for civil and military aviation, making it an indispensable reference for the aviation medical examiner or flight surgeon practicing in an operational or regulatory role. (The authors receive no royalties.)

The price for the book is $50.00, plus $7.00 postage in the U. S., $25.00 to Canada, and shipping rate to other locations outside of the U. S. is variable, payable by check, VISA, or MasterCard. Call or email CAMA for your copy! 770-487-0100 or civilavmed@aol.com

CAMA now has a Facebook page! In order to provide the best options for communication with our members and other interested parties, we have established a Facebook page. If you are already on Facebook, you may find our page by entering "Civil Aviation Medical Association" into the search box. We will post current events, photos, and other pertinent information about our organization. You are invited to ask questions or to post comments or photos on our page (inappropriate remarks/photos or advertisements will be removed). The page is monitored several times daily, and we will strive to answer your questions promptly. Please contact the CAMA home office if you have any questions, suggestions, or comments about the Facebook page.

JOB DESCRIPTION

Position: Staff Physician

Scope of Work: Aerospace medicine consultant providing advocacy for pilots and air traffic controllers. Assists pilot and controller client base with medical certification and qualification issues. Conducts activities in a manner that assures consistently high quality service results and client satisfaction while assuring aviation safety.

Responsibilities:

- Acts as a liaison between clients and the FAA Aeromedical Certification Division, Federal Air Surgeon and the FAA Regions, assisting clients with medical certification and qualification issues
- Develops a strong understanding of the FAA medical certification/qualification process
- Serves as a pilot/controller advocate, providing ethical and courteous communication when dealing with clients and ensuring they are fully informed
- Maintains accurate, comprehensive and legible notes on each client in an electronic format
- Follows established company policies and procedures in order to deliver service to clients
- Provides occupational medicine consultation to leadership and headquarters staff in support of the various service agreements
- Prepares and presents briefings on aeromedically relevant topics for contract clients, pilot organizations, conventions and/or seminars
- Serves as an Independent Medical Sponsor for client base, to include on-site meeting attendance as needed with 25% or more of time engaged in business travel
- Ability to work remotely after initial training
- Contributes to company Aeromedical Newsletter, company website and other client publications
- Participates as an active member of the Professional Staff and Quality Assurance Program
- Serves as mentor for Resident physician and new staff physicians when needed
- Participates in company staff meetings
- Participates in execution of strategic planning goals for company growth
- Represents AMAS at conferences, seminars and events as needed

Last updated: 13 Dec 2016

Principal Interactions: Interacts daily with clients, physicians, clinicians, FAA staff members, AMAS and AMAS staff members, corporate representatives, and other agencies as required.

Knowledge/Education Requirements:

- Must hold or be willing to obtain a valid license to practice in the state of Colorado as a doctor of medicine or doctor of osteopathy
- Experienced Aviation Medical Examiner (AME) – preferably Senior AME / HIMS Trained
- Board certification in Aerospace Medicine considered a plus
- Strong capability to work independently and as a team member within the context of a shared strategic vision
- Strong verbal and written communication skills
- Strong interpersonal skills, to support interaction with client base, company leadership and support staff
- Ability to utilize Internet, computer and email programs for delivery of services
- Aviation experience considered a plus

Authority Level: Non-Supervisory Physician Staff

Salary will be commensurate with qualifications and experience.

Supervision: Reports directly to the Director of Clinical Services, Dr. Phillip Parker. Interested candidates should send CV/resume to Doctors@AviationMedicine.com

AMAS
AVIATION MEDICINE ADVISORY SERVICE

Civil Aviation Medical Association

Sustaining, Corporate, and Life Members

The financial resources of individual member dues alone cannot sustain the Association's pursuit of its broad goals and objectives. Its fifty-plus-year history is documented by innumerable contributions toward aviation health and safety that have become a daily expectation by airline passengers worldwide. Support from private and commercial sources is essential for CAMA to provide one of its most important functions: that of education. The following support CAMA through corporate and sustaining memberships, and we recognize the support of our lifetime members:

Corporate Members & Sponsors

Allied Pilots Association
14600 Trinity Boulevard
Suite 500
Fort Worth, TX 76155
www.alliedpilots.org

Aviation Medical Advisory Service
7000 S. Yosemite Street, #110
Centennial, CO 80012
www.aviationmedicine.com

Casa Palmera, HTC, LLC
14750 El Camino Real
Del Mar, CA 92014
www.casapalmera.com

Harvey Watt & Company, Inc,
P. O. Box 20787
Atlanta, GA 30320-9990
www.harveywatt.com

SomnoMed, Inc.
7460 Warren Pkwy, Suite 190
Frisco, TX 75034
somnomed.com

Talbott Recovery Campus
5448 Yorktowne Drive
Atlanta, GA 30349
www.talbottcampus.com

Life Members

Prof. Michael Bagshaw, MB BCh
Sanjeev Batra, DO
Michael Boyer, MD
John R. Capurro, MD
Daljeet Kimberley Chawla, MBBS, FCGP DNBE
George H. Coupe, DO
Bill B. Curtis, MD
Andrew J. Davis, MD
M. Craig Delaughter, MD, PhD
Mark C. Eidson, MD
Mohammed Eisa, MD
Tony Evans, MD
Donna Ewy, MD
Edmond Feeks, MD, MPH
Aynalem Gebremariam, MD
Robert Gordon, DO
Dottie Hildebrand-Trembley, RN
Ernst J. Hollman, MD
Joseph Kearns, DO
Atsuo Kikuchi, MD
Stephen M. Kirkland, MD
Ernest J. Meinhardt, MD
Andrew H. Miller, MD
David P. Millett, MD
Story Musgrave, MD
Thomas Nguyen, MD
Michael G. Nosko, MD, PhD
Hugh J. O'Neill, MD
Milton A. Padgett, MD
Rob G. Parrish, MD, PhD
Michael A. Pimentel, DO
Jeffrey P. Powell, MD, DDS.
Sean Kevin Roden, MD
Robert M. Roeshman, MD
Mark S. Rubin, MD
Gerald W. Saboe, DO
Philip Sidell, MD
Sergio B. Seoane, MD
Kazuhito Shimada, MD
Brian Smalley, DO
Basil P. Spyropoulos, MD
E. Warren Stadler, Jr., MD
Ruth Steward, RN
Shepard B. Stone, MPS, PA
Salil C. Tiwari, MD
Lars Tjensvoll, MD
Harold N. Walgren, MD.
Alex M. Wolbrink, MD

Sustaining Members

Per Johan Cappelen, MD
A. Duane Catterson, MD
DeWayne E. Caviness, MD
Gary Crump, AOPA
Harold H. Haralson, II, MD
Harold N. Walgren, MD
Sir Rodney E. L. Williams, MD

New Members

CAMA is very pleased to announce a number of new members to our organization since our last publication. We welcome the following physicians and organizations into CAMA, and we look forward to working with each of them over the coming years.

Richard Curtain, MD
NE Alabama Surgical Associates
171 Town Center Drive
Anniston, AL 36205
Specialty: General Surgery

Charles Stephen Davidson, MD
3618 Old Nags Head Woods Road
Nags Head, NC 27959
Senior AME, Pilot, HIMS
Specialty: Family Medicine

Joseph Derosa, DO
17 Red Bud Lane
Huntington, WV 25701
Senior AME, Pilot
Specialty: OB/GYN

Donald A. Ray, DO, PA
808 Woodrow Wilson Ray Circle
Bridgeport, TX 76426
Senior AME, Pilot
Specialty: Family Practice

CAMA MEMBERSHIP DUES NOTICE FOR 2017

(*Required Information)

*MEMBER NAME & TITLE:	
*MEMBER STREET ADDRESS:	
*MEMBER STREET ADDRESS:	
*MEMBER CITY/STATE/ZIP/COUNTRY:	

AME NUMBER:		SENIOR AME?	YES		NO	

Please complete and return with your payment.

NOTE: Membership is from January 1st through December 31st of each year

Membership dues..... $ 125.00 U.S. Dollars
Sustaining Membership dues (optional)..... $ 250.00 U.S. Dollars
Membership dues for Retired Members..... $ 35.00 U.S. Dollars
Membership dues for Students..... $ 35.00 U.S. Dollars
Life Membership..... $1250.00 U.S. Dollars

Payment Options: CAMA Accepts checks, MasterCard and VISA only.

CHECK ENCLOSED	#	MASTERCARD		VISA		American Express	

CREDIT CARD NUMBER:	
EXPIRATION DATE:	
CVV/CVC SECURITY CODE:	
BILLING ADDRESS ZIP CODE:	
TOTAL AMOUNT/AUTHORIZED CHARGE $	

PRINT NAME:	

Signature or authorization statement for charge: _____

SPOUSE/SIGNIFICANT OTHER NAME:	

Check if you are a member of:

*PILOT	YES		NO	
*AME	YES		NO	
*AMA	YES		NO	
*HIMS	YES		NO	

*AOA	YES		NO	
*EAA	YES		NO	
*AAFP	YES		NO	
*AsMA	YES		NO	

*SPECIALTY:	
*PHONE NUMBER:	
CELL NUMBER:	
*FAX NUMBER:	
*EMAIL ADDRESS:	

Return form to: CAMA
P. O. Box 2382
Peachtree City, GA 30269
FAX: 770-487-0080
Telephone: 770-487-0100
email: civilavmed@aol.com

****(E-mail address is REQUIRED – all CAMA correspondence, registrations, notifications, and publications are sent via email. Please notify CAMA of any email address changes so you will not miss any important information! CAMA does not share your information with any other entity or organization.***

CAMA CORPORATE MEMBERSHIP FOR 2017

Corporation/Business Name and Address:

_____

_____

_____

_____

Please complete and return with your payment.

NOTE: Membership is from January 1st through December 31st.
Corporate Membership dues……..$ 300.00 U.S. Dollars.
CAMA accepts MasterCard, VISA, and checks only.

_____

Payment Options: **American Express _____**

Check Enclosed _____ MasterCard _____ VISA _____

Credit Card Number: _____

CVV/CVC Security Code: _____

Zip Code of Billing Address: _____

Expiration Date: _____ Authorized Amount $ _____

Print Name on Card: _____

Signature: _____

Return form to: CAMA
P. O. Box 2382
Peachtree City, GA 30269
FAX: 770-487-0080
Telephone: 770-487-0100
email: civilavmed@aol.com

PLEASE PRINT (* required information)

***Contact Person(s) Name: _____**

***Specialty/Type of Business: _____**

_____

***Phone: # ( ) _____**

Cell # of Contact Person(s): ( ) _____

Fax: # ( ) _____

***E-Mail Address of Contact Person(s):**

_____

(E-mail address required – all CAMA correspondence, registrations, notifications, and publications are sent via email. Please notify CAMA of any email address changes so you will not miss any important information! CAMA does not share your information with any other entity or organization.