

LARA

Low-Fare & Regional Airlines

Vol37 No 2 April/May 2020

www.laranews.net



This is an unprecedented time for the commercial aviation industry. Our dreams of a prosperous and sustainable future have been put on hold. But only temporarily. With support from our governments and industry bodies, the goodwill of our customers and the hard work and care of our people, we will rise again. And LARA will be there to cover every story, every deal, every innovation.

Glenn Sands, LARA Editor

• Training special issue • IT and MRO • Aircraft and Engine Leasing

**COVER**

Love in the time of Corona: The LARA team wishes all of our readers the best of health at this difficult time. #WeAreAviation

NEWS & FEATURES**4 COMMENT**

Planes, plans and a pandemic... Is it too early to talk about green shoots? Perhaps, but they are appearing.

6 NEWS

All the latest news and developments in the low-fare and regional airline industry as it copes with coronavirus.

12 NEWS ANALYSIS – ERA AND COVID-19

Glenn Sands talks to ERA Director General Montserrat Barriga about the plight facing Europe's regional airline industry.

14 MRO AUSTRALASIA 2020**All to play for in Oz**

Reporting from sunny Brisbane on one of the last MRO events before the lockdown.

16 AVIATION AFRICA**Focusing on the future**

The annual summit called for more co-operation and collaboration between nations and industry to achieve a sustainable future for African aviation.

43 DATA AND AI AIRLINE SOLUTIONS**Big brother with the best intentions**

The fusion of data and artificial intelligence is revolutionising the way airlines can monitor and perform their maintenance.

**18 AIRBALTIC****Beating the trend for the better**

At a time when all airlines are locked in a fight for survival, Michael Doran charts the 2011 fall and subsequent rise of Latvian carrier airBaltic through the words of its CEO, Martin Gauss.

TRAINING SPECIAL**22 TRAINING TECHNOLOGY****Attracting trainers to winning technologies**

Bernie Baldwin reports on some recently introduced solutions and where the industry may go next.

28 MAINTENANCE TRAINING**Preparing task-ready technicians**

The aim of modern maintenance training is to develop personnel with the all-round skills needed in the workplace.

34 QUADRANT SYSTEMS**Making pilots not promises**

Quadrant Systems has introduced its own pilot training facility backed by its experience from 25 years within the flight simulator industry.

38 TRU SIMULATION AND ICELANDAIR**Bringing training in-house**

Icelandair has embraced TRU Simulation's TrainOnSite for training its next generation of pilots. The rewards are evident.

49 AIRCRAFT AND ENGINE LEASING**A good time to lease**

Airlines have been snapping up leasing deals in unprecedented numbers. Henry Canaday gauges the health of the leasing sector.

57 IT AND MRO**The value game**

Emma Kelly investigates the new IT procedures aiding in the tracking and delivery of aircraft parts.

62 REGIONAL FOCUS**All bets are off in USA**

Hampered by politics and predicaments, the US low-fare and regional airlines are still finding ways to grow. But for how long?

66 FIVE QUESTIONS TO...

Neil Book, President and CEO of JSSI.

68 AERO-TECH TRENDS

Boeing; GE Aviation; Lufthansa Technik; Wizz Air; Yocova.

70 NEW APPOINTMENTS

AAR; airBaltic; Allegiant; Amco Services International; Boeing; CDB Aviation; Delta Air Lines; Eurowings; JetBlue; Jet Support Services; Menzies Aviation; Southwest Airlines; WestJet; Willis Lease Finance Corporation; Women in Aviation International.

IN THE NEXT ISSUE

- Propulsion Systems
- Revenue Management
- Ancillary Revenues
- Safety





Preparing task-ready technicians

Modern maintenance training aims to develop personnel with all-round skills ready for the workplace.

Bernie Baldwin reports on how some training organisations are realising that goal.

One of the safeguards for any company's business is a well-trained workforce. This is especially important, of course, when there is a high level of the mission criticality related to the final product, which is certainly the case for every aircraft maintenance technician and engineer.

The sophistication and complexity of modern aircraft demands training to match. Moreover, with studies in human behaviour also developing, training is not just about what is being taught, but also how it is being taught. New features being introduced to improve the quality of maintenance training are considering both elements.

“Through our On-The-Job training programme, we cover process tools and hundreds of hours on aircraft components to ensure that the strict standards are met and surpassed.”

Sajedah Rustom, CEO, AJW Technique

which range from a 5S [workplace optimisation elements: sort, set-in-order, shine, standardise and sustain], to first aid to soldering. “Also, on a quarterly basis, our Training Committee (which oversees the certification of all new qualifications) reviews performance levels and provides feedback and recommendations on evolving the training programme to ensure that AJW is always ahead of industry requirements,” Rustom emphasises.

PORTABLE SOLUTIONS

Dennis Floyd, VP Training and Professional Services for Boeing Global Services, offers a different tack on his company’s programmes. “Quality takes on many forms. Beyond basic compliance with global regulations, Boeing takes the view that quality relates directly to the impact that training has on its intended audience. High impact training is accessible, engaging and relevant to the audience. To this end, Boeing maintenance training continues to evolve from passive, lecture-based training to a highly interactive, student-centred learning approach,” he explains.

“Our latest training programmes use objective-based lesson planning to drive meaningful and actionable learning outcomes, fully supported by a suite of highly interactive and engaging training media,” Floyd adds. “Maintenance training technologies have typically had a large physical footprint, limiting their portability. With an eye on reducing our overall carbon footprint and on supporting our customers’ desires for flexibility in training delivery, we have focused heavily on developing highly portable solutions, all of which are available on licence.”

At Norwich-based KLM UK Engineering, Technical Training Sales Manager Chris Tubby has a similar story. “We have started to introduce far more interactive learning into the classroom to allow engineers to embed their theoretical learning from our instructors into real life scenarios without having to leave the classroom,” he confirms.

Emma Harris, Group Marketing Manager at Resource Group, notes that the apprentice programme at its training solutions division, LRTT, has been established for over a decade and a half. “We have always focused on delivering first-class technical training to meet the EASA Part-66 syllabus. However, we have recognised in recent years that this is no longer enough,” she admits.

“Our programmes have been enhanced to include a significant number of both individual and team focused enrichment activities. These aim to build personal confidence and enhance knowledge skills and behaviours,” Harris continues. “Routine progress reviews with the learners ensure they have sufficient feedback to comprehend their progress, not only in terms of exam results but attitudinal development and progress against being ‘workplace ready.’”

In Scotland, at Perth-based Air Service Training (AST), new initiatives to improve information flow and feedback between training staff and students across all courses have been introduced so training can be better tailored to the needs of the student,” according to Senior Training Manager, Andy Budge. “Actions to improve communication at all levels have been utilised to create a more joined-up, effective and efficient organisation. This has led to changes in course programming to continue to

Eyes on portability: Boeing Global Services has focused its latest highly interactive training programmes on supporting its customers’ desire for flexibility in training delivery.

Based at a 220,000 ft² facility in Montreal, Canada, AJW Technique is the global hub for AJW Group’s repair activities. Its CEO, Sajedah Rustom, highlights the ‘what’ element of the company’s training. “We focus on both quality control and quality assurance. Through our On-The-Job training programme, we cover process tools and hundreds of hours on aircraft components to ensure that the strict standards are met and surpassed. The programme is Transport Canada-approved and allows every qualified technician to receive an airworthiness certificate on every unit they have worked on,” she remarks.

As for recent enhancements, AJW Technique has recently added new courses



“One challenge we address is the health and safety implications of the practical activity, both numbers and the complexity of tasks, as these have a bearing on the programming of the practical activity.”

Andy Budge, Senior Training Manager, Air Service Training

deliver the required learning, but in a way that better supports the student.

“AST is planning to introduce a four-year sandwich course which would combine a modern apprenticeship and the EASA Part-66 requirements for an Approved course. This would aim to see students graduate with two distinct qualifications, one academic and one vocational, and position them for a long-term future in the industry,” Budge emphasises.

THEORY AND PRACTICE

Integral to how students are trained for MRO work is the balance between training in the classroom, the workshop and on-aircraft training. AST separates its locations by the book, notes Budge. “We do it as per the regulations – 2,400 hours for an Approved course, split into 60% theoretical learning (predominantly in a classroom) and 40% practical training. The latter is spread across three workshops delivering basic mechanical, electrical and avionic hand skills early in the course. The practical training is carried out at our hangar at Scone Aerodrome and is a realistic maintenance environment.

“One challenge we address is the H&S (health and safety) implications of the practical activity, both numbers and the complexity of tasks, as these have a bearing on the programming of the practical activity,” Budge adds.

It’s a similar story at LRTT, Harris confirms. “The split between practical and theoretical training has traditionally been based upon EASA-mandated percentage splits, whereby in our Cat A courses of 800 hours, up to 35% of the course should be theory and the

remainder practical,” she remarks. “LRTT, however, delivers course durations way in excess of the mandated minimums and the resultant enhanced quality of student output allows operators confidently to utilise the student at the workplace almost immediately.”

Although it adheres to regulations, KLM UK Engineering also claims a very advantageous element to the split of where training takes place. “We are in a very fortunate position that we can balance the training that we offer at our training college as we have the classroom, workshop and access to a live aircraft (a 737 Classic) all in one amazing, state-of-the-art, training facility,” declares Tubby. “This allows our students to gain the relevant theoretical

knowledge and then if there is a subject that is difficult to understand in the classroom, they can walk straight up to the aircraft and drive home that theoretical learning in a safe and controlled environment that others may not be able to experience,” he adds. “This allows us to develop students who are much more prepared for the real-life environment of a Part 145 maintenance facility in the future.”

BUDDY EXPERIENCE

Over in Canada, AJW Technique has a novel approach. “Our On-The-Job training programme is conducted as a Buddy Programme,” Ruston points out. “It begins in the classroom where all computer skills, processes and safety training are completed early on in a 20-hour module. After that, all trainees spend practical hours in the workshop where they are paired with senior, experienced technicians. This allows them to work in real time on components and learn and develop under close supervision.

“Our programme encourages and builds a sense of community and allows trainees to be exposed to real-time hands-on

AJW Technique’s On-The-Job training programme pairs trainees with senior technicians for hands-on experience working on components.





Too cool for school: With its focus on real skills in real environments, Resource Group believes in preparing its students for the 'reality' of the hangar or flight line.

experience instead of merely a curated classroom/workshop module,” Rustom comments. “We strongly believe that cross-training will create flexible and agile technicians who can execute their tasks under varying environments. We ensure that every technician is empowered to diversify their skills as part of their personal development plan. This commitment has enabled AJW Technique to rotate skillsets based on cell demand.”

All Boeing training programmes are preceded by an extensive ‘training needs’ analysis prior to their development. “This analysis clearly identifies the required knowledge, skills and attitudes to enable competent on-the-job performance across a wide range of maintenance tasks and personnel,” Floyd states. “The final step of this analysis is to match training needs with the most appropriate methods, which can include classroom lecture, practical exercises conducted in a classroom using real or synthetic training aids, tasks conducted in a workshop, or tasks carried out on a live aircraft in a hangar or on an active flight line.”

Beyond the environment in which maintenance technicians train, there is also the matter of the tools with which they are provided in order to progress. Boeing’s Floyd reports that the company has recently upgraded a 10-year-old training delivery

option. “We have been making use of 360-degree photography virtual aeroplane tours to create engaging, student-centred learning experiences. For our latest 777-9 model, we’ve taken this technology a step further by creating photo-realistic, computer-generated content,” he elaborates. Of course, while this applies to the 777-9 now, it may well be introduced for training on other types, such as the MAX family.

PRE-DELIVERY TRAINING

“This new approach opens up some interesting capabilities which will advantage customers receiving training on this aircraft. The first is that a fully realised aeroplane model, with interior scenes, exterior scenes and a full array of equipment is available prior to the aircraft being completed.

“Traditional photo-based tours require a standard production aeroplane, whereas the current tour is available now, in time for pre-delivery customer training. A second major benefit is the ability to remove panels and explore interior areas that are not normally viewable on a photo tour, for example, inside the wing fuel tanks.

“We’ve also included search functionality, allowing students to locate – quickly and easily – most major line replaceable units (LRUs),” Floyd continues. “This enables completion of a substantial portion of the mandated component

location tasks in a typical line and base maintenance training course giving airline customers the option of reducing the need to provide access to an aeroplane for maintenance training. In addition, the tour is highly portable and device-agnostic, finding many uses beyond the traditional classroom training environment.”

Portability and self-pacing are clearly functions that many want in their training tools. AJW Technique’s Rustom reports that all the company’s training modules have been migrated to its intranet, thus allowing technicians to plan their continuous training at their own rate. “They are also empowered to upgrade and develop their skills and learn new ones that interest them,” she adds.

“Internally, we have developed software that simulates mock-ups of our maintenance electronic systems and databases to boost computer skillsets. This allows trainees to test their skills, make mistakes and continuously learn from them.

“Our resource planning team considers the development and training opportunities for every technician. We ensure every technician is rotated through different cell units to encourage them to build skills across the board rather than having a few niche skills,” Rustom explains.

At AST, new tools planned include a bespoke scheduling system to mitigate the probability of human error in inputting data to the systems, says Budge. “This helps to reduce excessive manhours on rework activity and providing the possibility of freeing up more instructor time to better the student experience.

“Plans are also in place to acquire aircraft systems training rigs as well as the ongoing task of identifying replacement training aircraft, both rotary and fixed wing, and the

“We have been making use of 360-degree photography virtual aeroplane tours to create engaging, student-centred learning experiences.”

Dennis Floyd, VP Training and Professional Services for Boeing Global Services

associated engines and training aids,” Budge anticipates.

Like AJW Technique, KLM UK Engineering has developed its own online training vehicle called the Virtual Learning Environment (VLE). “This allows us to upload all our courses, such as CAT A, B1, B2 and B1.1 to B2 extension, onto the system and for engineers to study at their leisure if they wish to progress their career,” Tubby advises.

“This is particularly relevant for engineers who cannot afford to take time away from their jobs (such as contract engineers or RAF engineers looking to the future) to still earn but study in their own time to gain further qualifications. It also allows students from around the world to study for their licence and to gain all the



Hands-on approach: For Air Service Training (AST), practical training is carried out in a realistic maintenance environment at its Scone Aerodrome hangar.

theoretical EASA modules they need without spending money and time travelling. We currently have over 1,000 students around the world studying via the VLE.

“The next stage in delivering training programmes will be the development of AR (augmented reality) and VR which will give engineers access to components of the aircraft that they would not normally be able to see without removing panels and a high degree of time spent gaining this access,” Tubby adds.

Resource Group’s Harris also believes in VR but offers a note of caution. “Whilst VR and AI (artificial intelligence) certainly can recreate exact replicas of aircraft systems, the synthetic environment created rarely prepares the student for the reality of the hangar or the flight line. We focus on real skills in real environments and preparing our students for the workplace in as many ways possible,” she observes. ■

NEW

al40

TRAIN YOUR PILOTS WITH THE EXACT REPLICA OF THE FAMOUS DIAMOND DA40

LEVEL 5 (FAA)
FNPT II (EASA)

GARMIN G1000 NXI AVIONICS

ALSIM.COM

al sim

FLIGHT TRAINING SOLUTIONS

As a market leader for Fixed Base Simulators we supplied 400 simulators to 300 customers across 50 countries – for over 25 years.

Our customers are Airlines, ATOs, Flight Schools and Universities.



THE Airliner
FNPT II APS MCC (EASA)
AATD (FAA)



ALX
FNPT II MCC (EASA)
AATD (FAA)



AL250
FNPT II (EASA)
AATD (FAA)



AL42
FNPT II (EASA)
LEVEL 5 (FAA)



AL40
FNPT II (EASA)
LEVEL 5 (FAA)



AL172
FNPT II (EASA)
LEVEL 5 (FAA)

WANT A DEMO?

HQ: +33 2 40 03 77 74
CN: +86 137 6100 8036

US: +1 877 594 7426
INFO@ALSIM.COM

ALSIM PEACE OF MIND
400+ CERTIFIED SIMS, 300+ CUSTOMERS
50 COUNTRIES, SINCE 1994

A stylized illustration of a woman with dark hair in a ponytail, wearing large black sunglasses, a purple business suit with a matching vest, and red circular earrings. She is holding a red and purple handbag. The background is a vibrant red with a large, faint gear and a world map. A small airplane is depicted flying across the map, leaving a red trail. The AJW logo is in the top right corner.

AJW®

Looking to reduce engine maintenance costs?

Let us save you money

AJW Group is a world-leading, independent component parts, repair and supply chain solution provider, transforming efficiency in **commercial**, **business** and **defence** aviation

ajw-group.com