



**By John Stone, Vice-President,
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Some of the latest IT innovations supporting the MRO sector are from Ultramain, whose software addresses a broad spectrum of aviation maintenance needs. It fully integrates maintenance (line, base, engine, shop) with materials, labour, documentation, ELB and procurement. It provides the right parts to the right spot at the right time to support maintenance. Ultramain is a suite of applications that can be licensed and implemented individually as needed, allowing small operators to start small then add modules later as desired.

Innovations are continually flowing into Ultramain. One recent innovation involves optimisation for labour scheduling, hangar planning, maintenance scheduling, check execution, and materials stocking and ordering. In each of these processes, Ultramain algorithms optimise the outcome based on your inputs. 'What-if' modelling is used to allow outcome comparisons to help you select the optimised outcome you desire. Optimisation enables you to know in advance what you should be doing and how to achieve it.

Ultramain informs you in real time on what you are doing. This is a result of being a fully paperless system where operators receive Ops Approvals from aviation regulatory authorities allowing Ultramain to be their paperless system of record. Mobile devices and or kiosks replace paper task cards, allowing supervisors and planners to know what's actually taking place as work is

Innovative Ultramain

underway. After-the-fact data entry and related costs, delays, and additional staff are things of the past. Knowing where you are, what's done and what's not in real time is extremely valuable information.

It informs you of how you are doing in real time by showing you work accomplishment compared to your original (or revised) work plans. You will know if the planned work will be completed on time or not, and if not, why not and when it will be done. The same is true for billing. Are you on target, above or below, and why?

Another innovation is Ultramain ELB, a mature and proven ELB, approved and used at many airlines around the world. It is integration compliant to SPEC2000 Chapter 17 v4, which is the two-way integration specification and has been integrated with many M&E systems in addition to Ultramain M&E. It operates on iOS and Windows Mobile devices connected or offline to the ELB Ground System. To date, millions of flight sectors have been flown using Ultramain ELB.

Industry feedback is excellent. Possibly you have seen some of our recent ads

featuring our paperless customers. These cannot be placed without customer satisfaction and cooperation.

Ultramain is a paperless system, therefore, end-user transactions are accomplished using mobile devices. Using our software on mobile devices is so easy that we typically see prospective customers taking the devices from us in demos and doing transactions themselves. They can do it on the spot because it's that easy to do.

Unlike other offerings, the system is not rigid, inflexible software that requires users to conform to it. It is also not software requiring a build-out project to get it to work the way an operator wants, one that's always expensive and time-consuming. Instead, it is a highly flexible and configurable framework-based network that is data and metadata-driven. Ultramain is tailored to customer preferences. From Initialisation meetings, we set up and configure Ultramain to operate how the operator desires. Setup is quick and easy because we do it. ■

The screenshot displays the Ultramain Mobile Mechanic app interface. The top bar shows 'Back', 'ULTRAMAIN MOBILE MECHANIC', and 'Log Out'. The main content area is divided into two panels. The left panel shows task details for 'FAN BOOSTER MODULE ASSEMBLY' (Task ID: 7777-38-610-00-01-200) and 'A CHECK - IFE UPDATE' (Task ID: N100SU-A-12-JUN-03). It includes fields for Part, Serial, Asset Type, and Planned Start Date. The right panel shows task progress for 'Package ID N100SU-A-12-JUN-03', with 'Actual Start' on 2018-05-01 and 'Planned End' on 2018-05-07. It indicates 'Task Progress 4 of 16 Complete' at 25%. Below this, 'Task Progress Details' shows a percentage of 123%. The 'Labor Status' section shows: Not Started - 18.75%, Underway - 37.5%, Idle - 18.75%, and Complete - 25%. The 'Signoff Status' section shows: Mechanic - 31.25%, Inspector - 37.5%, RII - 0%, and Complete - 31.25%.

Ultramain Mobile Mechanic allows mechanics to easily access task cards and work instructions from mobile devices. Mobile Mechanic also supports electronic sign-off.