

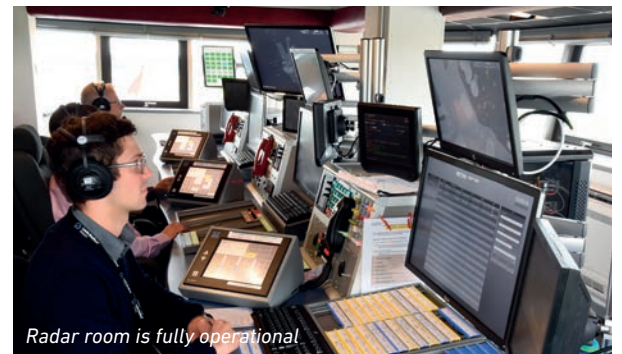
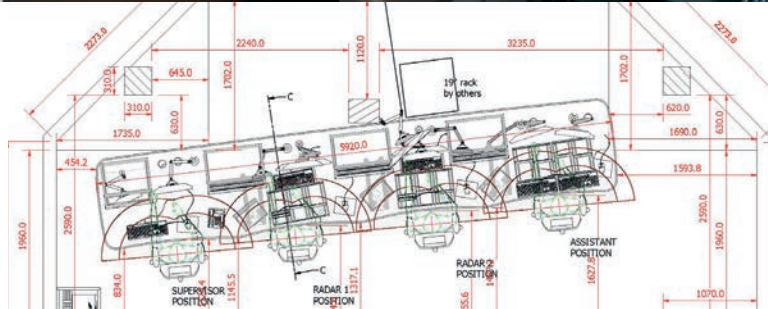
## Radar room consoles for Leeds Bradford Airport



The radar room nears completion

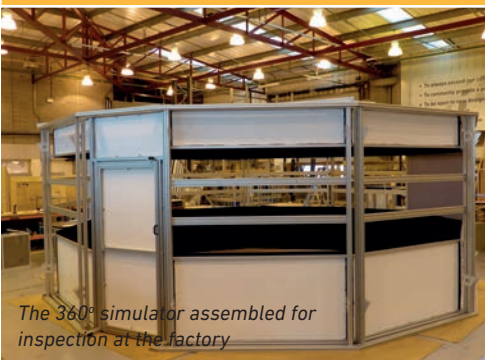
In a recent project, Thinking Space were tasked with providing brand new furniture for a refurbished radar room at Leeds Bradford Airport, the 16th busiest airport in the UK. In a complex room shape below the main control tower, with sloping faceted windows and a sloping door, Thinking Space had to ascertain which operators had to touch, reach and view what. This helped Thinking Space, working with LBA's technicians, to establish a workable design to fit within the envelope of the room, of which future expansions and futureproofing was key.

The old style fully enclosed consoles were replaced with a new open framework console for four operators, creating more space and light and coordinating with the new décor of the room. PIP housings and equipment pods were specifically designed, as well as a mobile flight strip printer trolley for the room. With access via a narrow flight of stairs, the Thinking Space console was sized accordingly, with parts transported and re-assembled once in the radar room space.



Radar room is fully operational

## Training simulator solutions



The 360° simulator assembled for inspection at the factory



The tower training simulator in action



The 180° simulator assembled for inspection at the factory

With Thinking Space offering a range of products in their company portfolio, collaboration between products to create a custom solution for ATC environments gives the ultimate in flexibility for clients.

Highlighting two recent cases, the first was to provide a 360° tower training simulator some 7 metres wide and 2.6 metres high. The simulator was constructed using the Kanya aluminium build system to create the framework. High quality, acoustic black wool serge was used for the areas surrounding the intended screens to create a blackout effect and provide sound absorption.

Thinking Space then provided four training consoles to fit within the 360° simulator, using the Core Assembly System, the build method to create the console framework. Eventually installed at a site in South America, the ATC simulator and training desks arrived with our clients before being assembled there. The whole simulator took no longer than a day to reassemble, with the training desks accurately positioned within the simulator rig to complete the final training facility.

The second solution was a 180° simulator for a Middle Eastern ATC client, constructed using the Evolution Media wall system. With six hinged sections giving a rotation system to hold six 42" flat screens, each section can be adjusted individually to suit the training requirements. Further screens can be added as necessary in the future, and PC supports are fitted to the rear of each screen bracket to create a tidy solution without the mess of cables trailing, as power supplies are held within each leg.

## Tower console alterations for the Irish Aviation Authority



The newly modified tower console now operational

Thinking Space recently demonstrated their ability to work within restricted timescales and tight tolerances when they completed console alterations for the Irish Aviation Authority, further to upgrade work at Dublin Air Traffic Control Tower.

The catalyst for the furniture modifications was the airports' upgrade to an electronic flight strip management system. Further to an initial site survey, Thinking Space discussed the various modification options available to the IAA. For consideration was the vast engineering work involved in removing the well-established existing furniture, as well as the time available to complete all works whilst ensuring the Control Tower was ready for full operations at the end of the agreed installation period.

Having identified a split point in the existing tower furniture, it was agreed that the top section of the 5 position controller console would be replaced with a new sub-frame, worktop, equipment upstands and monitor mounting solutions. Having worked closely with Thinking Space on previous projects, the IAA were confident of their engineering capabilities to deliver as per the agreed criteria.



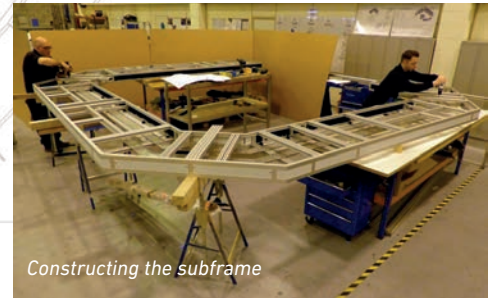
Fitting of the worktop onto the subframe

"I think what amazed me the most was the fact that the frame and counter top fitted almost to perfection on top of the original base. A great job by TSS well done to the team."

Peter Kavanagh – Manager Operational Requirements, IAA

Utilising their design and manufacturing expertise to ensure any limitations of the chassis were accounted for, Thinking Space used the CORE profile system to manufacture a 70cm high sub-frame that would be placed on top of the existing chassis. The sub-frame provided two advantages; it allowed the worktop to be fixed to the chassis without any problems of structural incompatibility. Secondly, it allowed flexibility if optional features and accessories were added, which was the case. The Moni-Trak system was installed into the worktop surface allowing flexibility to mount Novus monitor arms and lights along its length. Meanwhile, PIP panels were installed under the worktop surface, as well as additional storage.

With the design streamlined to fit effectively within the space provided, Thinking Space worked alongside IAA engineers to install the modifications. Requiring re-assembly after shipping, each length of the 15 metre console had to be fitted individually to avoid error and total shut-down of the facilities. Overnight working hours were limited to an installation window of between 21.00 and 05.00 ie. light traffic periods, during which the IAA vacated the Control Tower and operated from a contingency location. With only a few minor adjustments having to be made in situ, a professional installation service was provided.



Constructing the subframe

## International focus



Thinking Space are exhibiting at two major ATC events during February and March. The first is **Avalon Australia**, where an example of a tower console will be demonstrated at **stand 2A2 in hall 2**. Thinking Space have recently set up manufacturing facilities in Australia to support the local market, and the new demonstration console is one of the first examples to be created there. In March, Thinking Space will return once again to **World ATM Congress** in Madrid, where two examples of Air Traffic technical furniture will be on display at **stand 1235**. A tower console and radar console, in the latest colour trends, will be available to view.



Our international presence continues to grow, as there are now nine representatives around the world who will provide a local service for your control room furniture needs.

For a full list of our offices and representatives, please visit our website [www.thinking-space.com/join-us](http://www.thinking-space.com/join-us) or [www.thinking-space.com/contact-us](http://www.thinking-space.com/contact-us)

## Dual operator consoles for Bole International Airport, Ethiopia

Working with clients Peja East Africa for the Civil Aviation Authority Ethiopia, Thinking Space have designed and exported ten dual operator Air Traffic consoles to Bole International Airport, Ethiopia.

The dual operator consoles were custom designed to suit each operator position, complete with equipment mounts, creating eight different combinations of console required for the tower, approach and ground control rooms. In addition, a technical position as well as a search and rescue



Rendered proposal layout for the control tower

console, complete with communications unit, under desk keyboard trays, radar monitor mounting and map displays were designed to suit the clients requirements. All the consoles were designed and manufactured in the UK, with the client visiting the factory for a factory acceptance test, before the consoles were crated to their destination in Ethiopia. With the ease

of reassembly and some training back in the factory, the client successfully installed all ten consoles at the airport to the satisfaction of the Civil Aviation Authority Ethiopia.

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