

Something like one thousand parts (amongst the several thousands that a plane has), are very expensive and critical to operations. These parts can be easily tracked using RFLD. The RFID based system ensures that the tags are sewn in alongwith the cloth labels that a part carries. Each maintenance hangar or stores has several RFID readers deployed which can sense which of these parts is available in the respective locations. These RFID readers are in turn networked using middleware to a dedicated inventory management system that knows which parts are available where. Hence surplus parts in one location can be quickly identified and shipped out to places requiring them. This also reduces the amount of "insurance spares" that each hangar has to carry. Typically each hangar needs to carry some excess spares to always ensure that the required spare is always available (hence known as insurance spares). The new system means that such excess inventory need not be carried. This is a very big advantage to todays airlines, who have been squeezed due to low margins and high operational costs. The optimization of spares using RFID means that less cash is held up in inventory and more is available to meet the airline's operational cash flow requirements