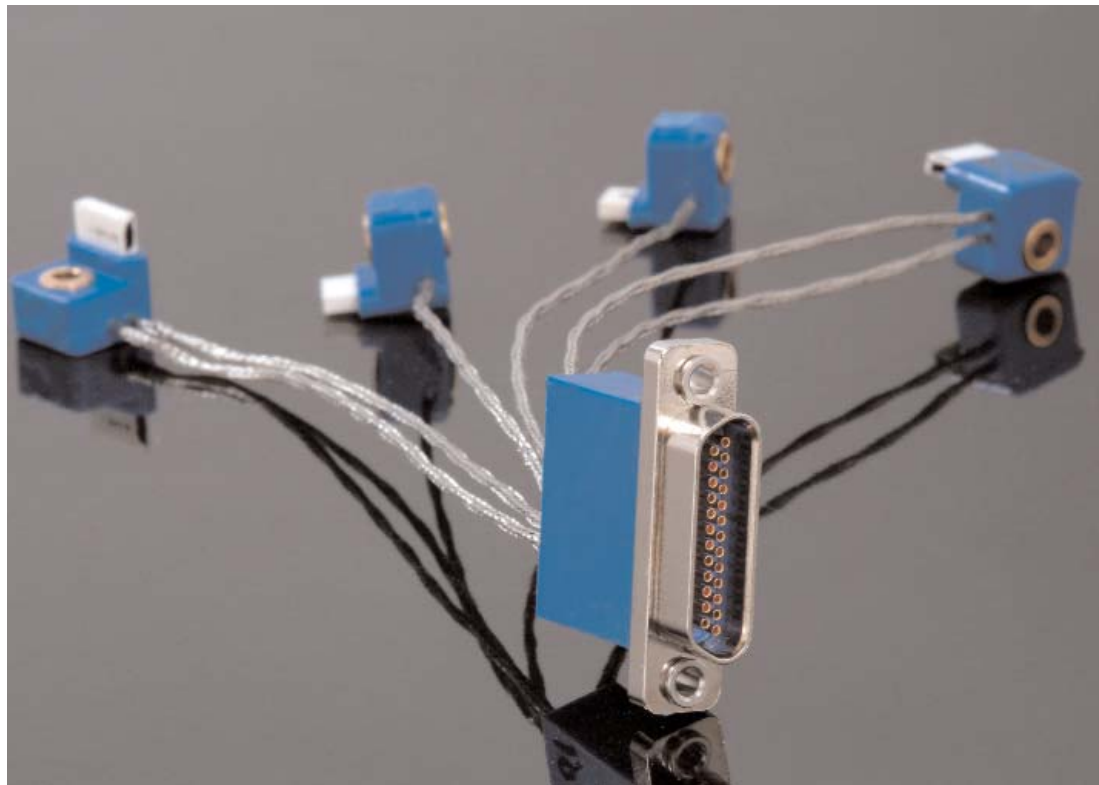


# RAPID PROTOTYPING AND PRODUCT DEVELOPMENT



## APPLICATION

Ultra light weight interconnect system applying 'Cat of 6 Tails' principles from a micro connector to a small bank of sensors.

## KEY FEATURES

Both weight and space were required to be kept to a minimum. Reliability was all important in this Aerospace/ Defence type application.

## TIMESCALES

A rigid timescale of 4 weeks involved tooling and specialised grounding ferrules.

## SCENARIO

Weight reduction was achieved using micro miniature twisted pair wires with a stainless steel braid for EMI/RFI purposes. No additional conventional cable jacket was used which simplified the sensor termination in the restrictive space available. To ensure effective grounding for the sensor a gold plated ferrule was used to create a bolt on reliable stud style fixing.

## ACTUAL

A customised back shell was tooled up to suit both 3 & 5 way variants of the sensor connector. It was necessary to encapsulate all backshells to withstand +150 to -150 degrees C. Specialised wire was sourced, screened and in turn made into a special braided (no jacket required) cable.

## SUMMARY

4 sets of low weight, high reliability, microconnect cables were manufactured, tested, and subsequently flown within projected time scales.

