Establishing electronic communication with an implanted device can be a key factor in its successful operation. Traditional packaging techniques and materials can prevent this type of communication, but PA&E offers manufacturers the option of enclosing their electronics within composite materials. Implantable Composite Packaging offers several advantages:

- **RF Transparency**: Signals into/out of implanted devices
- **Innovative**: Composite titanium and zirconia
- **Hermetic**: Leak rate $< 10^{-9}$ atm-cm$^3$/s
Implantable Electronic Packaging

Design History
We have been making implantable devices in volume for over 30 years.

Design Flexibility
Complex shapes can be easily realized without the need for elaborate and expensive mold tooling. Our expertise in titanium machining enables us to effectively produce a wide variety of geometries.

Development Flexibility
Need to move a pin? A simple engineering change and programming change and the next version is ready. No complex mold tools to scrap.

Better Standoff Distances
Our pins are sealed into headers using our Kryoflex® ceramic sealant - an excellent insulator. Other technologies such as gold braze use a metallic braze filler as a sealant, which, for a given geometry, reduces the effective electrical pin-to-body standoff distance.

Transparency: Prototypes to Production
Our prototype parts are identical to the final production parts. Need 50 parts to start your qualification process? No problem. You can start qualification testing with these parts with assurances that future parts will be identical. Other technologies use different production strategies depending on volume, so testing performed on low volume samples may have to be redone for larger volume production parts produced with different methods.

For further information contact us at sales@pacaero.com or visit our web site www.pacaero.com