



Avionics Integration & Engineering Corporation AG Rheinfelden, Switzerland

Established in January of 2000 in the Village of Reinach, Baselland. Moved to Rheinfelden, Switzerland, Canton Argau, close to German border.





Comprehensive *Understanding* of the *Essentials* and their accurate *Realization* is the *Key Element* to reach the highest level of *Safety* and *Satisfaction* everywhere.







# 2. Location Rheinfelden, Switzerland, at the border to Germany, close to Basel Airport. only 45 minutes by car to Zürich Airport only 30 minutes by plane to Geneva International Airport



## AIEC

# 3. Past Experience

- Transformed conventional B707-300 into EFIS Version incl. AFCS Interface
- Alteration CL601-3A into Dual Collins APS 85 with entire Avionics Retrofit
- Several F20 modified by APS 85/EFIS 86
- F50 Proline 4 Retrofit with SATCOM
- Several B727-100/200 SATCOM Mods



# 3. Past Experience (cont)

- Agusta helicopter A109K2 complete Avionics Retrofit
- CL601-3A Flat Panel Retrofit UASC R890
- Numerous FMS prototype retrofits....
- EASA STC certified Lockheed Jetstar II
- Holding numerous EASA STC approvals (EASA homepage link: <u>http://easa.europa.eu/certification/type-certificates/design-approvals-supplemental.php</u>)



# 4. Services

- A. Avionics/ Cabin Interiors/ Structural **Engineering**/ Certification
- Certification Program
- Engineering Order
- Wiring Diagrams
- Mech. Drawings
- Ground & Flight Checks
- Flight Manual Supplements
   Full Documentation

- Electrical Load Analysis
- Compliance Checklists
- **Stress Analysis** ٠
- **FMEA**
- Safety Analysis



# 4. <u>Services</u> (cont)

A. Avionics/ Structural Engineering/ Certification (cont)

- Development of STC Data Packages
- Turn-Key Project Management
- Customer requested Maintenance Engineering



# 4. <u>Services</u> (cont)

### B. Providing On-sight Installation Supp

- System Post Installation Check-Out
- Post Installation Troubleshooting
- Flight Check Support
- Customer Liaison
- Pilot Training



# 5. <u>Capability</u>

### A. AIRCRAFT MODELS

- Boeing 727/707/757/767
- DC8-72/62
- MD-83
- Bombardier CL 600/601-1A/601-3A
- Gulfstream II/ III/IV
- Dassault Aviation F10/F20/F50/F50EX/F900
- Hawker Beechcraft HS125-700/ BAe.125-800/ 900XP/ 1000
- Beech Kingair C90/200/B200/300/300LW/B300



# 5. <u>Capability</u> (cont)

### A. AIRCRAFT MODELS (cont)

- all Learjet (25, 31, 35, 36, 45, 55, 60, ...)
- Cessna Citation Jet
- Bell B430 helicopter
- Agusta A109 helicopter
- EC135 Eurocopter
- BK117 Helicopter



# 5. <u>Capability</u> (cont)

### **B. AVIONICS MANUFACTURERS**

- Baker Electronics
  - All cockpit & cabin audio products
- Honeywell
  - All Business Aviation products incl. TCAS/ACAS/ SATCOM .....
- Rockwell Collins
  - All GEN NAV products incl. Proline IV RETROFIT, TCAS/ACAS/SATCOM .....



# 5. <u>Capability</u> (cont)

- B. AVIONICS MANUFACTURERS pont)
  - Universal Avionics Systems Corporation
    - All systems incl. newest development, prototype installations Cockpit 1 and HUD
  - Thales Avionics (Sextant)
  - EuroAvionics
  - Garmin
  - ASPEN
  - .... and others more



# 5. STC EASA approved

Aircraft Type	Title	STC Number
Challenger 850	EFB Class 2	EASA.A.S.03333
Learjet 31	P-RNAV	EASA.A.S.03628
Challenger 601-3A	EHS Mode S	EASA.A.S.03023
Challenger 601-3A	CPDLC	EASA 10041282
BAe.125-800 series	EGPWS to RAAS	EASA.A.S.03187
BAe.125-800 series	P-RNAV	EASA.A.S.02676
Cessna 206/210	Aspen EFD 1000	EASA.A.S.03806
AIEC STC List extract.		
Ear as we also A IEC OTC List as a EACA have a second the list multiplied		

For complete AIEC STC List, see EASA homepage with list published.



# 6. Layouts





# 6. Layouts (cont)





# 6. Layouts (cont)



### Flat Panel Retrofit UASC R890 completed in Sept. 2004

## AIEC

# 7. Approvals

- Data Package approval Part 21DOA Approval Number EASA.21J.375, including Cabin Interior
- Data Package approval by Customer and Local Air Authority
- Data Package approval by FOCA, SWISS\*
   \*Swiss registered airplanes and bi-lateral agreements
- Data Package approval by FAA DER Services



# 8. Why choosing AIEC,.....

- Reduced resource investment
- Increased safety
- Risk sharing
- Improved Project Development
- Clear and transparent documentation
- Hands free for the main business
  - ... being a competent engineering partner



# 9. <u>Contacts</u>

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