

**ART**  
**Asset Recovery**  
**Technologies, Inc.**

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**Asset Recovery Technologies Telecommunications Case Study**

**CELLULAR SWITCH OFFICE (MTSO)**

**Challenge:** Shortly before cutover, the operation of a multi-million dollar cellular switch site was severely compromised when an electrical contractor rained metal shaving and filings from overhead and into the open switch frames while drilling holes for grounding straps. Our inspection revealed spiral metal shavings, filings and small metal particles had deposited throughout the card cages and onto the circuit packs and back planes while the switch was energized. Of critical importance was a final cutover date that loomed in less than 48 hours. Also, Ericsson had reserved the contractual right to void the warranty on the equipment until it could be demonstrated that all metal filings had been removed without resultant loss of reliability.

**Solution:** ART provided immediate on-site assistance through inspection and verification of the loss incident for cost recovery, followed by complete decontamination of the switch. All metal particles, filings and shavings were removed while the switch remained energized. Our consulting included photomicrographs and sampling of the various metal shavings and residue located throughout the switch, clearly documenting the source of the contaminant and enabling the pursuit of litigation against the contractor. The restoration involved careful tagging, removal and decontamination of every circuit pack in the switch and all transmission equipment, while maintaining strict ESD and EMI control procedures. The project included labeling and removal of all fiber optic connections, decontamination and infrastructure cleaning; all while the switch remained energized and functioning. This project was accomplished without loss of a single circuit pack, and the client was able to make the service cutover deadline on time.

**Value:** The full documentation of the damage for litigation purposes resulted in a satisfactory compensation to the client on the part of the electrical contractor's insurance company. Secondly, because of the prompt response and thorough decontamination of the metal filings, the switch manufacturer opted to reinstate the warranty. Not only were multi-million dollars worth of equipment saved, but also more importantly, the crucial cutover date for live cellular service was met, without any resulting loss of business or service to customers.