



Training Communications Operators during WW II
(Courtesy of Loyola University Archives)

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9-1-1 IN DISASTER OPERATIONS

By

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9-1-1 In Disaster Operations

- Since the late 1970's the nation has advertised "One Nation, One Number" for emergencies.
- Billions spent on infrastructure
- Reinforced message thru daily interactions
- Established support, funding stream, legislation, national organizations (National Emergency Number Association)



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- All 911 calls are routed to the nearest 911 Call Center (Public Safety Answer Point)
- Accurate call-back number (ANI) and location information (ALI) are provided to 911 call-takers with all Wireline calls
- During 2005 AT&T California processed:
 - 15.4 Million 911 calls
 - Average 1.3 Million 911 calls per month



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- **911 Network**
 - SS7 trunking, ‘Digital ALI’ Network, CAMA Trunks, 911 Selective Routers, etc
- **911 Database**
 - 20 Million ALI records within the AT&T footprint
 - Fully redundant system and network configuration
 - Developed and maintained in partnership with County Coordinators, ILECs and CLECs
 - AT&T Ca. 911 Database accuracy exceeds 99.89%!



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- Wireless 911 calls are routed through the existing E911 network to the nearest PSAP or CHP, and the wireless caller's callback number and location information are presented with the call.
- During January, AT&T California processed 503,051 Phase II Wireless 911 calls.
 - 404,694 directly routed to CHP
 - 98,357 directly routed to local PSAPs
- State 911 Program Office managing a coordinated deployment effort in partnership with CHP, AT&T, Verizon, WSPs and PSAPs
- Current CA implementation of the 65,000 cell sectors is 55% complete



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- VoIP users are either static, mobile or nomadic
- FCC Order 05-116
- Standards have not been developed making it difficult to provide accurate location information and 911 call routing
- State is coordinating an effort to deploy VoIP 911 utilizing existing Wireless Phase 2 designs and infrastructure



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- Public Safety Answering Point (PSAP)
- Primary and Secondary
 - Primary PSAP in California, LE agency with report taking responsibility.
 - Secondary PSAP in California, Allied agency with specific mission responsibility.



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- PSAP's are professional dispatch points in the Public Safety community
- Staffed by civilian, sworn, or mixed personnel
 - Higher level of security background
 - Well versed in NIMS, ICS, agency disaster protocols
 - Usually first point of activation in mass/major/disaster incidents



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- PSAP's have built in hardening and redundancy
 - Critical Structure building codes specific to region
 - Redundant service ingress
 - Multiple power feeds from isolated circuits
 - Looped wireline, fiber and/or microwave communications
 - Backup's
 - Generators
 - Alternate communications paths
 - Alternate Answering points



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- Issues in Disasters
 - Manpower (Heard that one?!?)
 - Trunk capacity
 - Wireless network/internet capacity/availability
 - Damage to infrastructure
 - PSAP, wired and wireless networks, etc.
 - Power grid impacts



9-1-1 In Disaster Operations

- Benefits
 - Single point of contact in and out
 - Professional trained personnel in calltaking process and procedures
 - Adjacency to disaster operations managers
 - Mass Notification Systems based on 911 databases
- DISCUSSION