Rapid Disposal and Rescue of Traffic Accidents on Chongqing Expressways

Kong Xiangzhi
Chongqing General Brigade of Traffic Administrative Law Enforcement
Chongqing is in the south of China. Its position is east longitude of 105-110 degrees, and north latitude of 28-32 degrees. Chongqing is in the center zone of Yangtze River Three Gorges.

The area of Chongqing is 82,400 square kilometers, which is two times of the whole area of Tianjing, Beijing and Shanghai. So it is the largest city in China. There are more than 31,000,000 people in Chongqing. The proportion of minority is 5.7%. The climate in Chongqing is sub-tropical monsoon climate. What's more, there are 13 districts, 18 counties and 5 autonomous counties in Chongqing.
The Mountain City
The first expressway in Chongqing: Chengdu-Chongqing Expressway was constructed in 1995.
The traffic mileage of current expressway of the city reaches 2,300 kilometers and the average daily traffic flow exceeds 320,000 sets.
I. Main Features of Expressways in Chongqing

1. Various long longitudinal slopes
2. High percentage in bridge and tunnel (group)
3. Exposed to severe weather of rain, fog, ice, snow, etc.
4. Distinct features in transportation hub
Long Longitudinal Slope
Tunnel
Fog
Rain
Ice and Snow
Distinct features in transportation hub
II. General Information of Chongqing Expressway Safety Management

1. No traffic accidents with above 10 casualties

2. No severely damaged secondary accident

3. No serious traffic jams

At present, the average time for disposing the scene of a traffic accident on Chongqing expressway is no more than 20 minutes, among which the minor accidents are disposed within 10 minutes, and the relatively complex traffic accidents are generally disposed within 50-70 minutes.
Unified management, comprehensive law enforcement
Safety: no traffic accidents with above 10 casualties
Smoothness: no serious traffic jams
High efficiency: the average time for disposing the traffic accident is no more than 20 minutes.
III. Experience for Rapid Disposal and Rescue of Traffic Accidents on Chongqing Expressways

i. Five Principles

ii. Five Rapids

iii. Five Guarantees
Five Principles for Rapid Disposal and Rescue of Traffic Accident

- Coordinated Action
- Accident Disposal as per Degree of Urgency
- Safety Prior to Smooth Traffic
- Rescue Prior to Investigation
- Smooth Traffic Prior to Obstacles Clearing
Five Rapids for Rapid Disposal and Rescue of Traffic Accidents

- Rapid Response
- Rapid Traffic and Scene Control
- Rapid Rescue of the Injured
- Rapid Investigation (Research)
- Obstacle Removal
Rapid Response

Dispatch police within 5 minutes and arrive at the scene within 15 minutes
Four ways to the scene

1. Common way
2. Reverse arriving way
3. Arriving through the opposite driveway
4. Arriving through a by-pass
Rapid Control

Rapidly control the scene or take traffic control measures in the first time to avoid the secondary accident.
Rapid Rescue
Rapid Investigation
Rapid obstacle removal

Dispatch various obstacle removal forces to rapidly clear the obstacles at the scene and restore the road access.
Five ways of stock-taking

Manual transportation  Forklift operation
Loader operation
Unloading of special vehicles  Crane hoisting
Vehicle Rescue
<table>
<thead>
<tr>
<th>Guarantee Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Guarantee</td>
</tr>
<tr>
<td>Mechanism Guarantee</td>
</tr>
<tr>
<td>Information Guarantee</td>
</tr>
<tr>
<td>Science and Technology Guarantee</td>
</tr>
<tr>
<td>Ability Guarantee</td>
</tr>
</tbody>
</table>
Establish the joint service command platform for rapid disposal and rescue of traffic accidents and strengthen the system guarantee

First, establish a three-level command platform for disposal of emergency on expressways

Operating Flow for Emergency Command System of Chongqing Expressways
Establish the joint service command platform for rapid disposal and rescue of traffic accidents and strengthen the system guarantee.

Second, establish the emergency linkage mechanism.
Establish legal systems for disposal and rescue of traffic accidents and strengthen the mechanism guarantee

First, legal system
- Legal obligations for rapid disposal of minor accident through mutual negotiation

Second, emergency plan system
- Orderly organization, rapid response, clear responsibility assignment and implementation and high efficient cooperation

Third, system mechanism
- Supporting systems Daily working mechanism
Establish early warning and monitoring for rapid disposal and rescue of traffic accidents on expressways, and strengthen the information guarantee.

First, strengthen the road patrol and supervision.
Establish early warning and monitoring for rapid disposal and rescue of traffic accidents on expressways, and strengthen the information guarantee.

Second, carry out the public alarm system.
Establish early warning and monitoring for rapid disposal and rescue of traffic accidents on expressways, and strengthen the information guarantee.

Third, build a network monitoring system.
Vigorously implement the policy of improving the efficiency by using science and technology, and strengthen the science and technology guarantee.

1. Network surveillance
   Remote monitoring command
2. Group calling system
3. Video equipment
   Photogrammetry technology
4. Multifunctional law enforcement vehicle
   Multifunctional patrol vehicle
5. Electronic auxiliary equipment
First, strengthen the construction and management of the emergency team.

Enhance the construction of emergency team and strengthen the ability guarantee.
Second, carry out the emergency training drills.

Enhance the construction of emergency team and strengthen the ability guarantee.
Enhance the construction of emergency team and strengthen the ability guarantee.

Third, actively make summary and discussion.
Thanks