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## **Introduction of Incident Command System for Disaster Management in Sri Lanka**



### **-Study Tour to the United States- Observe Emergency Management and Incident Command System in Practice**

**July 14-28, 2007**

Facilitating Institution: Disaster Management Centre of the  
Ministry of Disaster Management and Human Resources of Sri Lanka

Implementing Agency: United States Department of Agriculture, Forest Service (USDA/FS)  
through the U.S. Indian Ocean Tsunami Warning System (IOTWS) Program

Supported by: United States Agency for International Development (USAID)

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Incident Command System in Practice  
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## **Background**

The Study Tour for ten representative participants from Sri Lanka to observe Emergency Management in the United States and in particular the practice of Incident Command System in disaster management was organized from 14-28 July, 2007.

This study tour marked the final phase in the US Forest Service contribution towards introducing a formal disaster management tool to Sri Lanka—the Incident Command System (ICS). Introduction of ICS was a component of the two year USAID Indian Ocean Tsunami Warning System program. A similar study tour was organized during August 2006.

## ***Participants***

Out of the ten members of the study tour, seven were from organizations represented in the National Disaster Management Committee and the other three were district level administrators who are the first responders during a disaster.

All the members had completed the basic/intermediate ICS study course successfully. Some had also followed the detailed modules taught by the USFS consultants in Sri Lanka.

- Mr. R.M.M.B. Ratnyake, District Secretary/Government Agent, Nuwara Eliya District
- Mr. K.K. Kithsiri, Dam Safety Engineer, Ceylon Electricity Board, Generation Headquarters
- Mr. S.M. Premasiri, Additional Deputy Director/Data Processing, Hydrology Division, Irrigation Department
- Wing Com. Dammika Wijayasooriya, Assistant Director/ Emergency Operations, Disaster Management Centre
- Mr. Ernest Perera, Deputy Coordinating Officer-Ampara, Disaster Management Centre
- Mr. M.S.M. Kamil, Technical Specialist-Disaster Management, American Red Cross Society
- Mr. Wimalasena Weerakoon, Additional District Secretary, Galle District
- Captain H.M.D.S.R. Senarathne, District Disaster Management Coordinator/Galle
- Mr. Bandula Wickramaarachchi, Senior Engineer (Research & Design), Coast Conservation Department
- Mr. Lal Samarasekera, Divisional Secretary, Divisional Secretariat, Habaraduwa
- Ms. Indira Fernando, Sri Lanka Coordinator for the US IOTWS Program

## ***Organizers and Coordinators***

The program was organized and coordinated by Ms. Trudie Mahoney of the International Program Office of US Forest Service. She was assisted during the study tour by Mr. Ron Knowles and Ms. Erin D. Small both from the US Forest Services.

Trudie being the Coordinator for the entire ICS program in Sri Lanka since January 2006 was very familiar with the knowledge and the backgrounds of all the members. Her familiarity with the Sri Lankan participants' dialect, the terms the Sri Lankan's use and her awareness on the overall disaster management structure in Sri Lanka was very useful when interacting with the different US officials.

Ron Knowleds was also familiar to the Sri Lankans as he taught most of them the Basic/ Intermediate ICS program and also the module on Finance/Admin Section Chief. Erin Small is a young USFS professional who was very helpful to the Sri Lankan team.

All three of them traveled to all the appointments and coordinated very closely with the Sri Lankan team

## **Program in Summary**

### ***July 14--Travel***

The Team traveled from Colombo via Bangkok and Narita Airport to Seattle Washington. The travel was smooth although there were two unavoidable long layovers both at Bangkok and at Narita. This was due to Sri Lanka airport being closed during nighttime during this period.

### ***July 15--Arrival***

The team arrived in Seattle Washington mid day of July15. The coordinators were at the airport to meet and drive them to the hotel. A brief orientation of the program was given to the participants. The official program was to commence mid day on July 16 after a 24 hour rest period.

The team was too enthusiastic to take a rest! They organized themselves to visit the famous Pike Market, the space needle tower and the adjoining mini Disney land the same afternoon and also the science centre.

### ***July 16--NOAA Office, Seattle***

In the afternoon of July 16, the team visited the National Oceanic and Atmospheric Centre (NOAA) in Seattle. NOAA Mission—“*Weather Prediction for a Safe Community*”



*The Team  
listening to Ted  
Buehner,  
Warning  
Coordination  
Meteorologist*

Weather predictions play an important role in emergency management. NOAA Emergency Forecasters are involved in all emergency incidents and they are specialized in multi-hazard management. They form a part of the Planning Section in ICS.

Mr. Ted Buehner, Warning Coordination Meteorologist gave an excellent presentation on Partners in Weather Preparedness. He explained how NOAA collaborates with many different partners and stakeholders to give accurate forecasts.

This presentation was followed by a tour of the facilities at this centre.

### ***July 17--Washington State Office of Emergency Service***

*Mission—Minimize the impacts of emergencies and disaster on the people, property, environment and the economy of Washington State.*

The participants were warmly welcome by Emergency Program Manager in Tacoma George Crawford and his staff. They were initially shown how the building that housed this office has been built to withstand earthquakes that are prevalent in this area. The participants were given a tour of their main facilities--the Operations Room, Communication capabilities to broadcast emergencies, the Policy Room where high level decisions are taken at times of emergencies and how these facilities are located to maximize smooth operations.



*George Crawford,  
Earth Quack  
Program Manager,  
coming forward to  
greet the Sri  
Lankans*

The following presentations were made to the participants

- Robert Hieb, Program Unit Manager, EMD--Emergency Management Division Overview
- John Ufford (Planning Analysis and Logistics Services Manager)--Comprehensive Emergency Management Plan (CEMP) and Emergency Support Functions and also a presentation on Emergency Operatins Centre Planning
- Paul McNeil, Response Section Manager—Emergency Operations Center Operations
- Ken Parrish, Pierce County Emergency Operations Manager—November 2006 Floods, Local Response, Pierce Country Emergency Management.
- George Crawford, Earthquake Program Manager—Washington Tsunami Warning Procedures and Tsunami simulation Exercises

Participants also had an interesting tour of the Pierce County Mobile Command Vehicle—a very sophisticated facility.



**Pierce County Mobile Incident Command Post**

It is a complete modern office—fax, photocopier, sophisticated computers and also a long distance camera to observe the incident.

Even a small kitchen and a toilet would sustain you for a couple of days



The Disaster Management Centre in Sri Lanka can be compared to this organization as their mandates are very similar.

The participants were also shown two interesting videos. George Crawford and his staff graciously hosted the Sri Lankans to a sumptuous Chinese lunch.

After these meetings the participants drove down to Portland, State of Oregon.

## ***July 18--Forest Service Pacific Northwest Region Management, Portland***

It was an extremely busy time for this office as they were coordinating 13 large active fires in the region. The Sri Lankan participants were very grateful to Mr. Jim Furlong, Assistant Director of Operations, and David Summer, Deputy Director of Fire, Fuels and Aviation for taking time.

The participants received-

- An overview of the National Response Plan and the National Incident Management System used in the United States.
- Provided examples on how Incident Management Team are used on All Hazard Assignments.

## ***July 18--Northwest Interagency Coordination Center***

Since there were many incidents that the NWCC was currently coordinating it was a busy day. Centre Manager Gerry A. Day and Emergency Operations Manager Stephen Dickenson took time off to help the visitors understand their general functions.

It was a good opportunity for the participants to observe how they coordinated the number of large incident in an organized manner.

We were provided a tour of their Operations/ Predictive (intelligence) and Media sections.



*Listing to Stephen explaining the current situation and how they are responding (the orange tags on the map indicates the active fire incidents)*

## ***July 19--Oregon Emergency Management Centre***

The Salem office is the parallel organization for Oregon State like the Tacoma Office is for Washington State. The focus was on Oregon's Earthquake, Tsunami and Volcano Programs

Jay Wilson, Earth Quake, Tsunami and Volcano Program Coordinator made a presentation which covered the community level responses and the scientific aspects.

They shared very useful knowledge and experience on tsunami and other hazard preparedness.

## ***Detroit Ranger Station***

On our way to Redmond we visited the Detroit Ranger Station, Willamonte National Forest of the US Forest Service. Although this was an unscheduled visit, the District Ranger, Paul Matten gave a good presentation on the activities of his office and also how they use Incident Command System.



*Outside the Detroit Ranger Station--calm countryside*



## July 20--Redmond Air Centre

This was a facility spread across a large area and consisted of the following facilities--

- Smokejumpers Base,
- Supply cache for the region,
- Training centre
- Administration



*Receiving initial briefing*

The tour of this entire facility was an eye-opener for the Sri Lankan group who are in the initial stages of organizing disaster management and response in Sri Lanka.

The smoke jumpers perform a crucial role in fire management in the United States.



*Facilities to mend, fold, store the gear and a gym for the smokejumpers to keep fit were found in this area.*

The tour of the cache was very useful. Manager Eve Ponder explained very lucidly how it is streamlined from the point of receiving a resource order for supplies from an incident to the point of receiving the supplies back at the centre to how the supplies are refurbished to be used for the next incident.

The cache consists from many heavy types of equipment required in incident management (generators, machinery) to office supplies, health supplies, personal protection gear, and food supplies.



*Supplies are packed and loaded to be taken to waiting vehicles.*

*Agreements are pre-arranged with transport contractors. There are few vehicles in the centre at any given time to take off to an incident with essential supplies immediately*

*Eve explaining...all including the manager herself are in hardworking gear—hive of activity*



At the Redmond Air Centre we met Kerry Kirk—the Administrator of the Facility, Bill Selby—Smoke Jumper Unit Manager, Michael Gomez—Training Manager and Eve Ponder—Manager of the Cache.

This centre employs only a few permanent staff. During the fire seasons they employ many seasonal employees and contractors.

## ***July 21--Rest Day***

After a five day strenuous schedule everyone needed a rest day but very specially the three USFS coordinators.

During this Rest Day Trudie was to make inquiries of possible incidents in the Oregon State that the team could travel to the following day. Most parts of Oregon State received rain the previous day (which was quite unusual during this part of the year), thus most of fires were settling down. After making inquiries it was decided to take the team to the Happy Camp, Elk Complex ICP which was in the State of California.

In the meanwhile the participants were having a good day shopping!

## ***July 22--Travel to incident and visit Umpqua National Forest Office***

On our way to the Happy Camp Elk Complex Incident, the team stopped at Umpqua National Forest Office in Roseburg. All forest offices are on 24 alert to spot signs of fires. During the time we visited this office, helicopters were trying to track a smoke that had been spotted in the forest. The office was in constant communication with the pilots using a 'automated flight following' computer program.

## ***July 23--At the Elk Complex Incident***

Living two days at an incident site, observing how the Incident Management Team manages it using the Incident Command System, was the key element of the study tour. Incident Command System is still only theory to the Sri Lankans. They need to watch it being practiced to fathom this management tool.

From this incident command post a number of fire incidents were being coordinated and managed—the reason it being called the Elk Complex incident.



*Trudie giving specific instruction on how to put up the tents and at the end organized to hoist Sri lankan National Flag near the camping area*

When we arrived at the Elk Complex Incident Command Post at Happy Camp the mood was very somber. A very unfortunate incident had occurred. Just a few hours before a

pilot attached to this incident had died when his firefighting helicopter had crashed into a ridge in densely forested terrain.

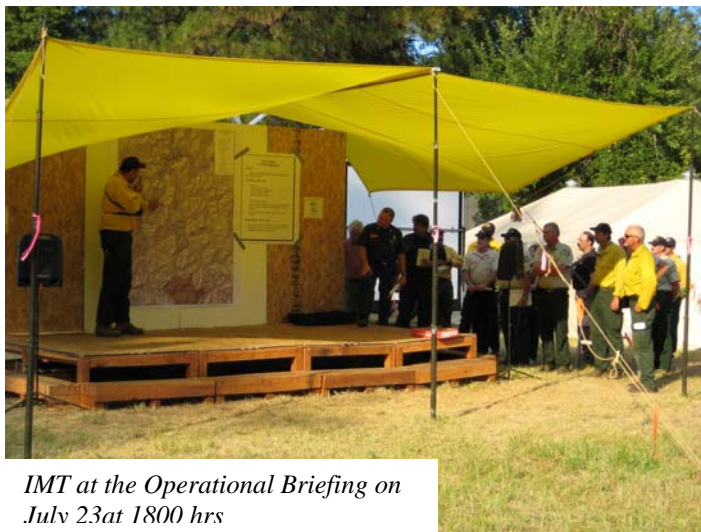
Adding to the unfortunate incident two kitchen crew members (from a private company) were drowned in the nearby Klamath River the same afternoon. We all felt the grief in the camp.

Nevertheless the Sri Lankan team received lots of support to set up camps and to settle for the next two days

The Study Tour members participated at the 1800 hrs Night Operational Briefing as observers.

### **Strategic Planning and Operational Briefings**

Few participated at the Planning Meeting at 1900 hrs.



*IMT at the Operational Briefing on July 23 at 1800 hrs*



*Planning Meeting*

Both meetings were held strictly to the schedule in a business like manner and was concluded within 30 minutes

### **July 24--Second Day at the Elk Complex Incident**

The day started rather early with the member being ready to go for the 0600 Day Operational Briefing.



All responders detailed for the operational period attend the Operational Briefing.

The Operational Briefing is following by Branch Directors addressing their team staff with much details.

During this time Elk Complex conducted two operational periods. The day responders attended the briefing at 06000 hrs and the night responders at 1800 hrs.

Commencing 1000 hours the team toured all sections of the ICP and received briefings

## Key sections of ICS in Action



*Incident Commanders Office tucked-away in a quiet area of the ICP*

*Finance and Cost Unit at work*



*Planning Section Chief Tim Baal giving us a briefing regarding the Elk Complex and on Planning Section Chief's duties in general.....*



*Human Resource Specialist play an important role.. ensure that all members of the team (nearly 1200) are working in a stress free atmosphere*



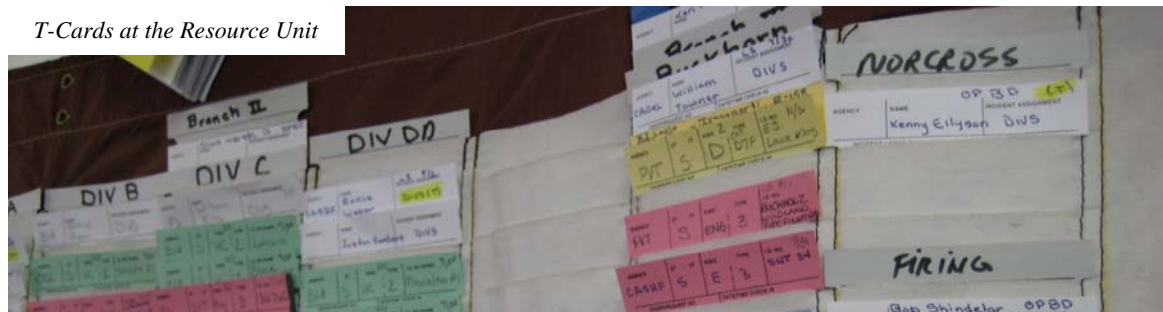
## Incident within an Incident

While the Elk Complex Incident was at its peak the helicopter crash was considered an incident within an incident, and also the deaths of the two kitchen staff who were drowned during off time. Both incidents, especially the helicopter crash and the resultant death of the pilot, needed proper investigations and delicate handling.

While the IMT Deputy Incident Commander Tom Cable took charge of this incident within the incident; Incident Commander Mike Dietrich resumed the overall charge of the day to day management of the Elk Complex.

The following day a Stress Counselor was scheduled to meet with those who were closely associated with the helicopter especially at the point of the incident. As the Human Resource Specialist explained, the team needs to be in completely alert to manage a disaster.

T-Cards at the Resource Unit



BRANCH I		OPERATIONAL PLANNING	
VISION/GROUP OR OTHER LOCATION	5.	6.	RESOURCE
		WORK ASSIGNMENTS	
L/m	PREP CONSTRUCTED DOZER AND HANDLINE FROM THE RIDGE TO KLANATH RIVER ON THE NORTH END OF WINGATE FIRE. ASSIST WITH FIRING OPERATIONS WHEN IMPLEMENTED. BACKHAUL		REQ. HAVE NEED
N/O	PREP DECOMMISSIONED FOREST RD ON EAST EDGE OF TITUS FIRE FOR PENDING BURNOUT OPERATIONS. BACKHAUL.		REQ. HAVE NEED

STRATEGY PLANNING MEETING	
What	Who
1. Current Situation	OSC/SITL
2. Fire Weather Forecast / Fire Behavior Forecast	IMET/FBAN
3. Control Objectives	IC
4. Division Assignments / Tactics	OSC
5. Air Operations	AOBD
6. Safety / LCES	SOF
7. Staff Comments	
A. Logistics	LSC
B. Finance	FSC
C. Information	FIO
D. Resource Advisor	
8. Agency Reps	
Line Officer(s)	
IC Closing Comments	IC

Strategy Planning Meeting Agenda, maps and the 215s displayed at the Meeting Facility

## Logistics



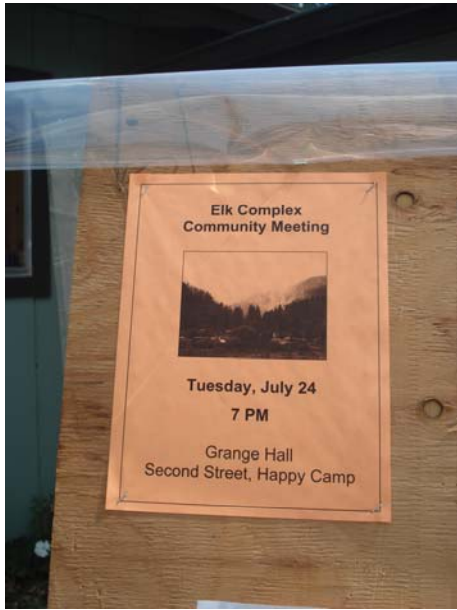
*Mobile Kitchen serves warm breakfast and dinner. The lunch is pre-prepared and served in bags (as most responders need to take lunch to their respective operational sites). Facilities to wash hands and the dining area.*

*Receiving a meal from the mobile kitchen window.*



*Clean showers, mobile toilets and medical care for the responders*

## Community Meeting



It was fortunate that the Sri Lankans were able to attend the meeting the Incident Management Team had with the Happy Camp Community that evening. This was the second meeting the team had had with the community since taking over the incident less than a week ago. The next meeting was scheduled for the following Saturday.

The meeting began with a little boy from the community offering a bouquet of flowers to the Incident Commander in appreciation of his Team's efforts. Generally the community was happy with the management of the incident but few expressed concern that the helicopters and heavy vehicles were disturbing the otherwise very calm community and of the heavy layer of smoke in the area. They wanted normalcy restored early.

## July 25--Leaving the Incident



*Presenting a souvenir to the Incident Commander and saying Good Bye the Sri Lankan way—Ayubowan (May you live long)*

*By this time the Incident Commander Mike Dietrich was relaxed enough to smile and pose for a photograph with the Sri Lankan Team.*

*Even during the previous two days when he was really busy and worried regarding the helicopter crash incident, he never failed to inquire whether the Sri Lankan team was looked after in his camp.*



## **July 26--Northern California Service Centre, USFS**

Visiting the Northern California Services Center was similar to the centre we visited in Redmond on July 20. The purpose of visiting the Redding Centre was to provide an awareness regarding the Resource Ordering and Supplying System (ROSS). This is a database that is maintained for the entire nation. All equipment and emergency management personnel are recorded in this database with details. The Sri Lankans explained that a similar database has been initiated in Sri Lanka.



*Demonstration on ROSS but they still continue to main paper records—details for each resource are entered in differently coloured forms*

## **July 27--Rest Day**

We spent the rest day at Holiday Inn Express at Fishermen's Wharf area.

## **July 28--Departure**

### **Lessons Learnt**

Disaster management in the United States is well organized. On the one hand there are disasters that recur every year—fires, hurricanes, earthquakes. On the other, they are a resource rich country.

Since Tsunami 2004 Sri Lanka has shown much interest to organize disaster management response. It will be very helpful if Sri Lankans study in detail the operation of the Emergency Centres and Inter-agency Coordinating Centre when streamlining disaster management in Sri Lanka.

The general dedication of the American people to achieve perfection and their military like discipline when managing disasters is also worth commenting.

The exposure that the team received to watch Incident Command System in practice cannot be over-emphasized. We all left US with the firm conviction that ICS is a practical tool.

## Observations of the Study Tour Participants

As the head of the Sri Lankan study team, Government Agent Mr. R.M.M.B. Rathnayake, of Nuwara Eliya district pointed out we cannot replicate what we saw in the United States in Disaster Management. The exposure to observe the overall organization structure of the United States is very useful when shaping DM network in Sri Lanka.

He also added with much gratitude the warmth and trouble the United States took to accommodate the Sri Lankan Team at all organizations that were visited. In almost all instances the Head of the Institution took time off his schedule to be with the team and make them feel welcome. Mr. Rathnayake said up to now he considered the Americans as a rich and proud nation—"but now I know they are not so but extremely friendly".

Mr. Bandula Wickremaratchchi e-mail to Trudie also summarizes the sentiments of everyone in the group.....

*Hi Trudie,  
We had a pleasant flight back to Colombo as scheduled.*

*It is my great pleasure to thank specially you and your staff Ron and Erin for making very successful study tour in USA. Very frankly, it is a wonderful experience for me. As GA, Mr. Rathnayaka mentioned we feel that we are closer enough as in one family.*

*The schedule of the tour was well planned and we could gradually acquire the structure, organizations and procedures in ICS. The visits made to different organizations were laid the foundation for the Camp study. Then two days in the Camp was the most successful, real incident experience gathered, making ICS more meaningful. On the way back, at the Bangkok Airport, we met Hon Minister of Disaster Management Mr. Mahinda Samarasingha and we had a chance to have a chat for few minutes. Truly, the tour made us much confidence on ICS, and no longer the Sri Lankan ICS will be in practice hopefully.*

*As a responsible officer in the Government, I could apply the ICS strategies in the day today activities too. If you could spend few minutes on the attachment, which is described my areas of responsible, you will recognize and feel how successful of your valuable time spend for training us.*

*Please convey my regards to my dear friend Ron and Erin.*

*Thank you and Best Regards*

*Bandula*

## Our Gratitude...

Organizations visited in the United States to gain knowledge on emergency management

- Ted Buehner, Warning Coordination Meteorologist and staff at National Oceanic and Atmospheric Centre (NOAA) in Seattle
- George Crawford, Robert Hieb, John Ufford, Paul Micneil and Ken Parrish and all staff at Washington State Emergency Management Service. Staff of Pierce County Mobile Command Vehicle.
- Jim Furlong, David Summer and staff of Pacific Northwest Region Management office (Portland) of the Forest Service.
- Gerry A. Day, Stephen Dickenson and staff of the Northwest Interagency Coordination Center, Portland
- Paul Matten at the Detroit Ranger Station
- The staff at the Redmond Air Centre, specially Kerry Kirk, Bill Selby, Michael Gomez and Eve Ponder
- Staff of the Umpqua National Forest Office

- Susie Stingley-Russell, Deputy Coordinator North Ops, Northern California Service Centre, Redding

#### Elk Complex Incident Management Post

- Incident Commander Mike Dietrich and the members of the IMT for accommodating the Sri Lankan Team as observers.
- Members of the California Conservation Group
- Staff at the Happy Camp Ranger Station (Klamath National Forest)

Staff of the International Program Office of US Forest Service at Vallejo California for administrative and logistical support

#### US IOTWS Program Head office in Bangkok

- Peter Collier, S.H.M. Fakhruddin and staff for helping with the arrangements

#### USAID Mission offices in Bangkok and in Sri Lanka

- Solita Muthukrishna for the assistance with necessary visas to travel

Sri Lanka Ministry of Disaster Management and Human Rights and the Disaster Management Centre of Sri Lanka

Last but not least the three Coordinators of the US Forest Service who took extra care to ensure that the Sri Lankans learnt much as they could from this study tour and also that they enjoyed it.—Thank you Trudie, Rom and Erin.

## Rest Days and Evenings

This is how the rest days and the evenings were spent... lots of fun and shopping Wal-Mart and Fred Myer were the favorite spots!



*In Seattle the Pike Place Market....*



*In Seattle Space Needle and Science Centre*



*Driving towards the State of Oregon we stopped at the Detroit Dam. The Sri Lankans were impressed by this little boy who knew so much about Sri Lanka—Geography being his favourite subject*



*A Chinese Buddhist Temple in Weaverville and posing for a picture with a big cowboy (another friend of Ron)*



*After a shopping spree  
Last stop was Fisherman's Wharf area in San Francisco*

