

**COLUMBIA SPACE SHUTTLE RECOVERY, Palestine ICP
Bennett's NR IMT
Lessons Learned**

1. MOST NOTABLE SUCCESS AT THE INCIDENT:

(Safety) Although the Columbia Recovery Effort was a unique incident from the perspective of the divergent agencies involved, health and safety issues varied little from those found on wildland fires.

External:

(Finance) Using Buying Teams and Incident Business Advisors (IBAs) on this complex incident was very successful; they each provided great service. This practice should be continued when Incident Management Teams (IMTs) are responsible for a majority of the management of "All-Risk" or non-wildland fire incidents.

(Logistics) The "transfer of command" with the Pacific Northwest (PNW) Team #3 contained "reasonably accurate" property accountability records (for items like radios, cellular telephones, computers, and global positioning systems). Signed transfer of property accountability documentation is critical when IMTs transition, especially on long duration incidents. In addition, assigning a Federal Emergency Management Agency (FEMA), logistics or property accountability person would have expedited tracking equipment.

(Plans) A great transition occurred with the Pacific Northwest (PNW) Team #3. We worked together through an extended transition period that was needed to gain familiarity with the new All-Risk situation and procedures.

(Plans) Work relationships were good with the Environmental Protection Agency (EPA) and National Aeronautics and Space Administration (NASA), both at the National Scientific Balloon Facility (Balloon Base) ICP and with the unified operation staffs at the Palestine Branch ICP.

(Incident Command) The most notable success was the true spirit of cooperation between NASA, EPA, Texas Forest Service (TFS), FEMA, and the Northern Region IMT working towards accomplishing the assigned mission.

(Safety) Ability of Incident Safety functions (Lufkin MAC and IMT Safety) to communicate and support each other.

Internal:

(Plans) Although many members of the organized Incident Management Team sent substitutes for their positions, the working relationships and productivity levels were great.

(Plans) A few key local AD's (Administratively Determined Hires) and other support personnel aided the incoming teams in maintaining continuity through the transition.

(Plans) Personnel with GIS skills were a key component of the Situation Unit's capability to support the complex mapping process required by this incident. This position will likely become a more important, permanent resource to teams.

(Incident Command) This was not a typical incident, but it did require a lot of communication between the Command and General Staff to develop and execute the planned daily operations plan.

(Safety) Cooperative interaction between EPA and IMT Safety assigned to the incident.

2. MOST DIFFICULT CHALLENGES FACED AND HOW WE OVERCAME THEM

External:

(Finance) Lack of overall strategy and coordination between branches, as well as rapidly changing objectives (i.e. new excursion areas to be searched), resulted in confusion in demobilization planning and delays and inefficiencies in resource allocation. This situation could have been alleviated if we had carried the organization one step further and instituted an Area Command that unified all agencies.

In today's cost conscious world, we increased the cost of Palestine Branch by as much as \$100,000 per day (25%) with the heavy utilization of contract crews. In the normal fire scenario, this would not be an issue, since we would be able to utilize the benefits of the contract. However, in this situation we paid the contractors through the contract to provide PPE, boots, transportation, and other minor services, and then provided all those items at government expense anyway. I am not saying that we did wrong, just that the crew contracts need to include an alternate pay schedule when circumstances require the government to provide services such as clothing, laundry and transportation. Times are changing and we need to change our processes accordingly.

There was one Contracting Officer Representative (COR) and one Interagency Contracting Officer Representative (IACR) assigned to the entire incident. The situation required the COR and IACR to represent crews assigned to all four branches of the incident plus the staging area.

The heavy use of contract crews resulted in numerous potentially serious language barrier incidents in the medical unit. Additionally, with as many as 49 contract crews camped under one warehouse roof, there were several violent conflicts between crewmembers during periods when contract crew's COR's were not available. These issues tended to involve our Human Resource Specialist (HRS) person, since the issues had to be resolved.

Protocols need to be developed that assure contract crew COR's are available on the incident 24 hours a day once the crew numbers exceed some threshold like 10 - 15 crews. Staying in motels doesn't work because the problems tend to erupt at night.

Contracting Officer Representatives (COR's) for the contract crews need to be more familiar with the contracts. People were given erroneous contract interpretations to obvious contract questions by COR's onsite when our team first arrived.

COR's need to be taught to interact with the HRS person, similarly to the way the Interagency Resource Representative (IARRs) communicate with the HRS person on a regular basis.

We overcame this challenge by working with the COR and IACR over the phone, or dealing with the issue in the best possible manner until the COR or IACR could travel to the Palestine Branch.

(Logistics) Need a FEMA warehouse catalogue and clear policy/guidelines on purchasing, so that the Ordering Unit knows what is available from FEMA. Incident Management Teams request a FEMA Liaison Officer be assigned to each team for "All-Risk Assignments."

(Logistics) On non-fire incidents requiring training before assignment, we need an interpreter to interface between Spanish-speaking crewmembers and both field and ICP personnel. Safety concerns over communications in the field were identified due to lack of bilingual training. An interpreter was provided for retraining of existing crews and newly arriving crews.

(Plans) Unavailability of support personnel needed for the incident. At times, we went through dozens of names to try to fill positions. Although many of our training sessions and organizations are full of qualified personnel, most were not available for this assignment. In many cases, we solved the problem by having other team members reassigned to positions in which they had dual qualifications, leaving many other positions unfilled, and having team members perform double duties.

(Plans) A good inventory accountability system was in place by FEMA, but tracking and accountability between teams was poorly executed. The Deputy Plans Chief spent a large portion of his time tracking computer equipment with some success. Some equipment was located in entirely different units, as personnel transferred operations and took needed equipment with them without documenting the transfer of accountable property. A short list of unknown locations for accountable property will remain when we transfer command to another team.

(Incident Command) One of the most difficult challenges was working with the pseudo MAC Group/Area Command, and the attempt to set incident priorities and distribute critical resources throughout the four branches. Even though the incident was contained from the time the shuttle materials landed on the ground, the targeted grids in the corridor and excursion zone seemed to change almost daily by adding additional grids to the defined branch. In turn, this challenged the team to develop an accurate, critical path projection and revise it as conditions warranted.

(Safety) Cooperating agencies that had not previously been involved with the Incident Command System. The professional interaction of cooperating agencies and among counterparts ensured a mutually beneficial attainment of incident objectives and success of the mission.

(Safety) Providing adequate safety oversight to the search groups was a challenge. Resource requests were continually unable to be filled at either the national or local level resulting in a shortage of Safety Officers (SOFs) on the line. This shortage can be contributed, in part, to agencies with qualified personnel that would not allow an assignment

to an incident that was not a wildfire or considered a national emergency. The issue of critical overhead availability was also present at the operations level.

Internal:

(Plans) We tried to manage within the 12 hour work guidelines as given within the Delegation of Authority, and failing to do that, justified the extended hours needed for key personnel and managed within the 2:1 work rest ratio.

(Incident Command) One of the most difficult internal challenges resulted from the mixed messages received during each sections daily conference call. These mixed messages made it difficult to keep all the Command and General Staff on the same page and remain focused on our mission. There was a fair amount of time spent dispelling rumors. Also, it impacted some of the discussions at the pre-planning and the planning meetings.

(Safety) Field, transportation, and camp safety was the predominate focus of safety on this incident with the Medical Unit recording a significantly high number of patients treated for the commonly termed "camp crud" and heat related illnesses. At the height of the incident, over 47 crews were tightly housed under a six-acre warehouse roof. This was a logistical necessity, given the lack of dry camp choices in a region prone to severe weather events. However, poor ventilation and close quarters created a setting conducive to the spread of colds and viral illnesses. Dehydration was identified as a significant health risk to field personnel who did not consume an adequate amount of fluids to remain hydrated. The problem of heat related illnesses is not new, and the message was openly discussed, but initial awareness levels remain low among crews unaccustomed to work in these environments.

(Safety) Twp radio systems were tried with neither being completely satisfactory to ensure crews, supervisors and the ICP could remain in contact during operational periods. Initially, two types of radios (King, VHF and Kenwood, truncated) were being used; these proved to be ineffective due to terrain influences. An attempt to solve the problem by ordering a single NIFC radio cache did not improve communications due, in part, to the limitation of having only twp repeaters installed. Communications remained a problem throughout the incident in spite of assigning "human repeaters" and the use of phone cells.

Safety Discussion

Transportation concerns always hold a predominant concern on incidents. Only one vehicle collision occurred during the team's assignment, and only five collisions documented collisions occurred throughout the entire incident, none with injuries. This was a significant accomplishment, with an estimate of over 653,886 miles driven by IMT assigned crews and personnel (not including Balloon Base use).

3. WHAT CHANGES, ADDITIONS, OR DELETIONS ARE RECOMMENDED TO TRAINING?

External:

(Finance) Contract crew representatives need to be assigned to the incident and stay at the Incident Command Post (ICP).

(Finance) Contract crew bosses need to be taught that non-English speaking crewmembers must be accompanied by an interpreter when going to receive medical attention, supplies or other services from the incident. I know this is simple, but it is real.

(Logistics) "Camp Crew" bosses need to be fully qualified, or camp crews should not be sent to incidents. Three unqualified camp crew bosses were received in this incident.

(Plans) Consider training needs for Command and General Staff on potential All-Risk situations and unified commands with other key agencies considering the homeland security issue.

(Incident Command) All firefighters, including contract crews, receive the required training annually prior to the fire season. However, on some "All-Risk" incidents, like the Columbia Shuttle Recovery, additional HAZMAT and BIOHAZARD training is required prior to deploying the crews. One problem associated with this training was ensuring the non-English speaking crewmembers (roughly 60% of the contract crews), received appropriate training. In order to accomplish this, the IMT had to find a bilingual instructor (EPA person).

(Plans) Both Status Check-In Recorders on this incident had never been exposed to the Incident Resource and Status System (IRSS) software program. Nationwide, teams are utilizing this database program to track resources, record time, facilitate demobilization, etc. The basics of the I-Suite program should be a part of the Status Check-In Recorder Course.

(Incident Command) Two suggestions: Activate IMT earlier on these large All-Risk national incidents, and establish Area Commands when two or more IMTs are competing for critical resources.

(Safety) Providing training and integrating other agencies not typically involved in incident management would provide a better understanding of the role and functional responsibilities of ICS during future All-Risk incidents.

(Operations) Fully qualified strike team leaders did not know how to use a GPS unit. The Team recommends to the training group that another task be added to the Single resource crew boss task book that requires that the individual demonstrate the ability and/or proficiency in using a GPS Unit. It is becoming more important all the time to be able to use GPS units for fire assignments as well as all risk assignments.

Internal:

(Plans) Composite teams that are more available than current IMT's to respond to All-Risk situations that are staffs with critical jobs at their individual agencies.

4. WHAT ISSUES ARE UNRESOLVED?

External:

(Plans) Significant amounts of other equipment was located on the incident, such as United Space Administration (USA) equipment without our knowledge of an accountability process in place. We have documented the equipment that we located and provided this inventory to the incoming team.

(Safety) The issue and concern of leasing and operation of 15-passenger vans for incident transportation needs to be resolved. Information developed by the National Highway Transportation Safety Administration (NHTSA) and a cautionary use warning, issued April 15, 2002, identifies significant risks of rollover due to center of gravity, and handling characteristics of these vans. Strict incident use protocol was established while using these vans to transport crews. One action, reduced speed limit, created additional hazards when the vans were driven on narrow roadways with posted speeds above the 55 mph limit placed on the drivers. These vans should not be leased for incidents, unless all USFS policy directives (File Code 6700/7130, July 12, 2002) are in place.

(Safety) Providing training and integrating other agencies not typically involved in incident management would provide a better understanding of the roles and functions of ICS during future All-Risk events.

(Safety) Reviews of Medical Unit visits seem to indicate a trend among some contract crews that members are not physically capable of completing the work to which they are assigned. The number of ailments for which health care is requested may indicate that personnel are not properly screened for pre-existing conditions or the fitness levels required to perform the duties.

Internal:

(Incident Command) One of our greatest challenges is ensuring a clear understanding of the ICS organization and its capabilities to expand and contract based on the complexity of the incident. Also, there is a need for a common situational analysis used to address All-Risk incidents and help guide the agency administrators.

(Information) Concerns about staffing and ordering for the team. When the NR IMT is dispatched, more timely and immediate information services could be provided if there is an option to bring an additional IOF2 (T). Not doing this results in primary staff working beyond safe hour limits in order to meet demand.