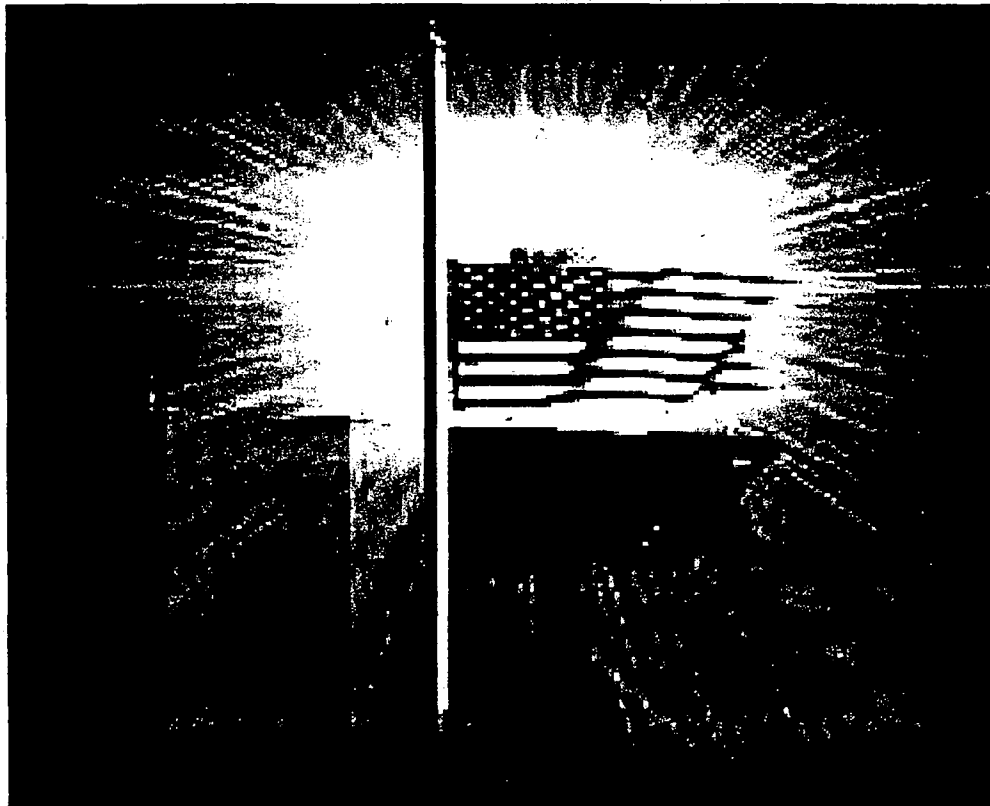


**FDNY
INCIDENT ACTION PLAN
OPERATIONAL PERIOD
FRIDAY
DECEMBER 21, 2001
0700 – 0700**



.PLAN 87

OPERATIONAL PERIOD**Friday 12/21/01 0700 hours –Saturday 12/22/01 hours****OVERALL INCIDENT OBJECTIVES**

1. Provide for the health, safety, and welfare of all personnel working around the incident.
2. Provide for the recovery and identification of as many remains as possible, and return to next of kin.
3. Coordinate with all involved agencies to support the operational needs of the incident.
4. Document all critical items and significant events.

OPERATIONAL FACILITIES AND LOCATIONS

Incident Command Post	100 Duane Street
Operations Post	10/10 Station (Liberty & Greenwich)
West Command	Vesey & West (West & Liberty Sectors)
East Command	Liberty & Church (Church & Vesey Sectors)
FDNY Cache	Quarters of 10 & 10 – open 0800-2000 hrs.
FDNY Parking	West & Warren Streets.
Additional parking at DOT lot (SW corner of West & Warren Streets)	

OPERATIONAL RESOURCES**FDNY WTC TF**

Recovery Team	75 Officers & Firefighters
Suppression Team	10 Officers & Firefighters
FAST Team	7 SOC Officer & Firefighters
GPS/BFU Team	10 Officers & Firefighters per 24 hour tour

FDNY/EMS

11 people per day shift / 11 people per night shift

WEATHER FORECAST

Day: Clear Skies, Hi of 42 degrees NW winds 15/20 mph. 10% chance of precipitation.

Night: Clear, Low of 30 degrees NW winds 10 mph. 10% chance of Precipitation.

Outlook: Partly Cloudy, Hi 42 degrees. Winds 10 – 15 mph. 0% chance of Precipitation.

Anemometer Locations: 11th floor of the Verizon Building, 3rd floor 10/10 Station, 17th floor of 125 Liberty, 10th floor of 2 WFC; OEM Command Bus at West & Warren, East Command, and Federal Post Office.

12/21/01

FDNY IAP – NOT FOR PUBLIC DISTRIBUTION

ACCOMPLISHMENTS (Past 24 hours)

1. Recovery operations continue.
2. Pull down of 6 WTC completed. Cutting and debris removal continues.

CONTINUING ACTIONS

1. Application of water to South Tower area and where heat and smoke are escaping in an attempt to extinguish/reduce the heat. Operation continues.
2. Operations continue on debris removal from the North Tower area with intermittent use of handlines to cool debris.
3. Steel cutting @ Bankers Trust (130 Liberty St.), from 11th floor down to 8th floor continues on a 24-hour basis with a shift change between 1700 – 1900 hours. Handline fire prevention/suppression support from FDNY will be necessary on a floor-by-floor basis. This work continues. Sprinkler & Standpipe systems are OOS.
4. Demolition of 6 has been completed. Hand line fire prevention/suppression support from FDNY required on Vesey St. as necessary.
5. NYDOL PESH issuing personal monitoring for Pd & FD.
6. West Street Siamese at 3 WFC is OOS. Use Vesey Street Siamese if needed.
7. Demolition work at 3 WFC. Burning on floors 1-10 from 1600 to 2400 hrs. FD support needed fire suppression/fire prevention. Observe exclusion zone.
8. Glass removal from the west and north façade of Bankers Trust along Washington St. from the 39th floor down, Sunday night and Monday night.
9. PAPD & Mooretrench will enter North & South Projections at 0900 & 1500 hrs. daily to inspect dewatering pumps in PATH tubes. This will be an ongoing operation. This information will be updated weekly.

PLANNED ACTIONS (Next 24 hours)

1. Demolition work at 3 WFC. Burning on floors 1-10 from 1600 to 2400 hrs. FD support needed fire suppression/fire prevention. Observe exclusion zone.
2. Precutting of south bays of WTC 6 completed, pull down should be complete by 12/21/01. FD support required for suppression.

ANTICIPATED ACTIONS (48 - 72 hours)

12/21/01

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SPECIAL INSTRUCTIONS:

1. **FDNY Sector Chiefs will approve all searches.**
2. **No open flames or warming fires. All fires will be extinguished by FDNY.**
3. **Operations Post is requested to fax the name of the 3 Safety Chiefs for each tour to the Incident Command Post.**
4. **PPE requirements are as follows:**
 Red Zone – Helmet, Safety Glasses & Safety Shoes, Coveralls, Long-sleeved Shirts.
 Inner Zone – Helmet, Safety Glasses, Safety Shoes, Respirators, Coveralls & Long-sleeved Shirts. **FD Helmets with reflective tape must be worn when working on the pile to identify as members of the dept.**
5. FDNY personnel parking is located on the south side of Warren St., 250 feet east of West St. Access to the FD parking lot must be made through the West & Chambers Street checkpoint. Members will be issued a site access card at the beginning of their shift. These access cards must be prominently displayed to allow entry onto the site. The tan access cards shall be handed in at the end of the shift. Coveralls and respirators will be available at the FD Warren St. parking lot.
6. GPS is to be used to plot locations of all victims, remains, fire equipment and apparatus. If the GPS is not operational, hand held GPS operators will manually record grid locations using a **grid map dated 09/20 or later**. GPS units are available through the Sector Chiefs, who shall contact the GPS Team via channel 5.
7. When any SCBA or compressed gas cylinders are found, the Sector Chief will contact ICP for Fire Prevention notification. Cages are at East & West Command for temporary storage of cylinders.
8. Enclosures on North and South projections on West Street are locked. The keys will be located with the FDNY Command Post, NYPD Officer at enclosure, and OEM.
9. Prior to any vehicles being removed/towed from buildings, FDNY Operations Chief must determine if a foam handline is needed.
10. A charged handline must be in position prior to any steel cutting operation inside of buildings.
11. Void entries and searches where elevated Freon readings exist (1 & 2 WTC) require O₂ monitoring prior to entry.
12. **All underground insertions/void searches must be coordinated with FDNY SOC Chief on duty and the IC at Duane St. to ensure safety.**
13. **DC will ensure 1 BC attends the daily Contractors Shift Overlap meeting at 3 WFC on 30th floor at 11:45 pm.**
14. **New exclusion zone map for chiller room issued, see attachment.**
15. **Recovery information included, see attachment.**

12/21/01

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DEPARTMENT OF DESIGN AND CONSTRUCTION UPDATE

ACCOMPLISHMENTS (Past 24 hours)

1. 164 tiebacks installed in slurry wall south of 2 WTC (Liberty Street)/ 135 tensioned. 2 rigged & 27 grouted. This is ongoing.
2. Pulled down portion of WTC 6

PLANNED ACTIONS (Next 24 hours)

1. Continued debris removal in footprints of 1,2,4,5 & 6 WTC.
2. Dewatering of Sub grade and PATH tunnel via North & South Projections continues.
3. Demolition of 5 & 6 WTC completed. Debris removal continues.
4. Core drilling & tiebacks continue on Greenwich, Liberty & West Streets.
5. Continue debris removal on 8th – 11th floor at Bankers Trust. Cutting torch work restarted, FDNY handline for fire prevention/suppression support will be necessary.
6. Burning in 3 WTC on floors 1-10 from 1600 to 2400 hrs. FD support needed for fire suppression/fire prevention. Observe exclusion zone.
7. Continue Excavation of Chiller Unit #5. As per York Engineers Chiller #5 does not contain Freon. Bovis Safety Plan will be followed during excavation.
8. Glass removal from Bankers Trust continues.
9. Removal of South Tower box beam located on the 28th/29th fl. Hand line fire prevention/suppression support from FDNY will be necessary during this work.
10. Clean pump screen in South Projection 0900hrs and 1500hrs.
11. Verizon will perform underground restoration and reconstruction of manhole located at Albany and Greenwich st. Access will be required for 1 week.
12. Cutting operations will continue in Winter Garden/Amex building.
13. Insertion into Tunnel E scheduled for Friday 12/21 0700-1200 hrs Soc req. This is for environmental sampling. Entrance thru north projection.
14. Insertion into Tunnel F scheduled for Friday 12/21 1200-1700 hrs Soc req.

ANTICIPATED ACTIONS (48-72 hours)

1. Core drilling and tiebacks continue on Greenwich, Liberty & West Streets.
2. Dewatering of PATH from No. Projection & Refrigeration Plant from So. Projection.
3. Demolition of the S/E corner of 3 WTC to continue. New exclusion zone as per attached drawing.
4. Debris removal to continue in footprints of 1,2,4,5 & 6 WTC.
5. Debris removal to build new westerly road parallel to Liberty St.
6. Removal of box beam from 28th/29th fl. Hand line for fire prevention/suppression support from FDNY required:

There is an OEM representative located at the OEM trailer (Murray and West - 212 941-5337) to contact DDC to handle contractor problems. To contact the contractors on site, DDC has a person stationed at 10/10 to assist. OEM is also the contact for OSH

12/21/01

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FDNY – WTC SITE SAFETY OFFICER BULLETIN # 1

December 21, 2001

As a result of the 2nd Alarm Fire inside 3 WFC (AMEX Bldg) on Sunday, December 2nd, it is imperative that the FDNY be **VERBALLY INFORMED** of all steel cutting activities prior to commencement.

All on site Primes/Subs will notify the FDNY Operations Post (10/10) via phone at (212) 425-4278 prior to the start of steel cutting operations. Additionally, no steel cutting shall start until FDNY personnel are on the scene and **VERBAL CONTACT** has been made with a FDNY Chief/Company Officer.

Be advised it is still mandated that all Primes/Subs fax their Daily IAP Progress Reports to the FDNY Incident Command Post at 100 Duane St. (646-613-8403) by 1500 hrs.

Thank you for your cooperation,
D.C. Ronald Spadafora
FDNY Site Safety Officer.



FIRE DEPARTMENT

FATALITIES/RECOVERIES (As of 1200 hours 12/20/01)

FDNY/NYPD/EMS/OTHER 138

CONFIRMED DEAD 558

HUMAN REMAINS 11,583

CONFIRMED FIREFIGHTERS
IDENTIFIED 121

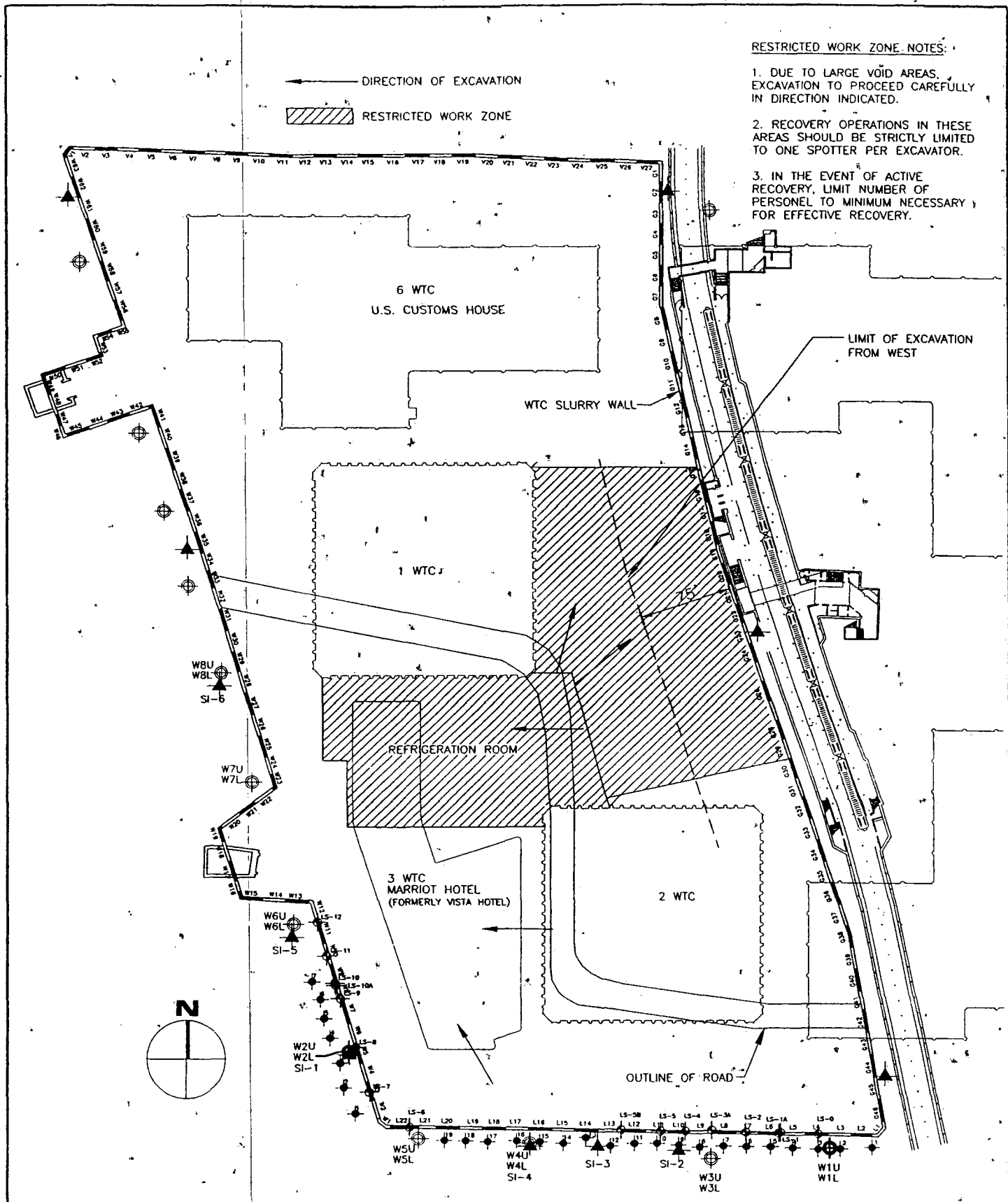
FDNY RECOVERY TEAM PROTOCOL

There are approximately 13-15 FDNY Recovery teams formed each shift, depending upon available manpower. A Recovery team consists of 1 officer and 4-5 firefighters. The teams are assigned to various locations inside the recovery zones (see map) depending upon the location of heavy equipment being used to remove debris.

Each recovery team has a designated spotter located at a safe distance from the heavy machines. When human remains and/or personal items and equipment are observed the operator of the machine is ordered to stop and the remaining members of the team are summoned to examine the debris pile more closely. Upon the conclusion of their examination the machine operator is ordered to resume operation. There is a designated Chief Safety Officer for each of the three zones inside the recovery area. They act as a liaison between the FDNY operations and the construction company safety officers.

Heavy equipment is operated in such a way as to ensure a clear view of all material being loaded onto the trucks. One machine picks out the debris from the pile and lowers it to the ground for viewing by the spotter. If a closer examination is required the remaining members of the team are summoned to examine the material. After being viewed, a second machine is used to pick up the material and load it into a truck for removal from the site. Occasionally one machine performs both "picks", when a second piece of heavy equipment is unavailable. Under no circumstances is the material being removed from the site by heavy equipment allowed to be placed directly into a truck without first being dropped to the ground for observation. In this way the chance of missing human remains and articles/items of importance is greatly reduced.

GPS is to be used to plot locations of all victims, remains, fire equipment and apparatus. If the GPS is not operational, hand held GPS operators will manually record grid locations using a grid map dated 09/20 or later. GPS units are available through the Sector Chiefs, who shall contact the GPS Team via channel 5.



LZA/THORNTON-TOMASETTI
WORLD TRADE CENTER RECOVERY

641 Avenue of Americas
New York, NY 10011
212-741-1300

By: BK

Checked By: CP

Date: 12/12/01

Safety Message

12/21/01

Major Hazards:

Crane Operations

Demolition Operations

Biological Hazards

Dust /Airborne Particles

Falling Glass & Debris

Traffic

Walking and Working Surfaces

Open Shafts

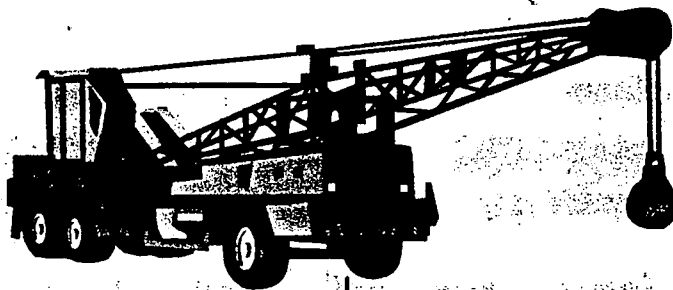
Hazardous Materials

Lack of PPE

Cold Weather

EXCLUSION AREA

Circle of
Danger

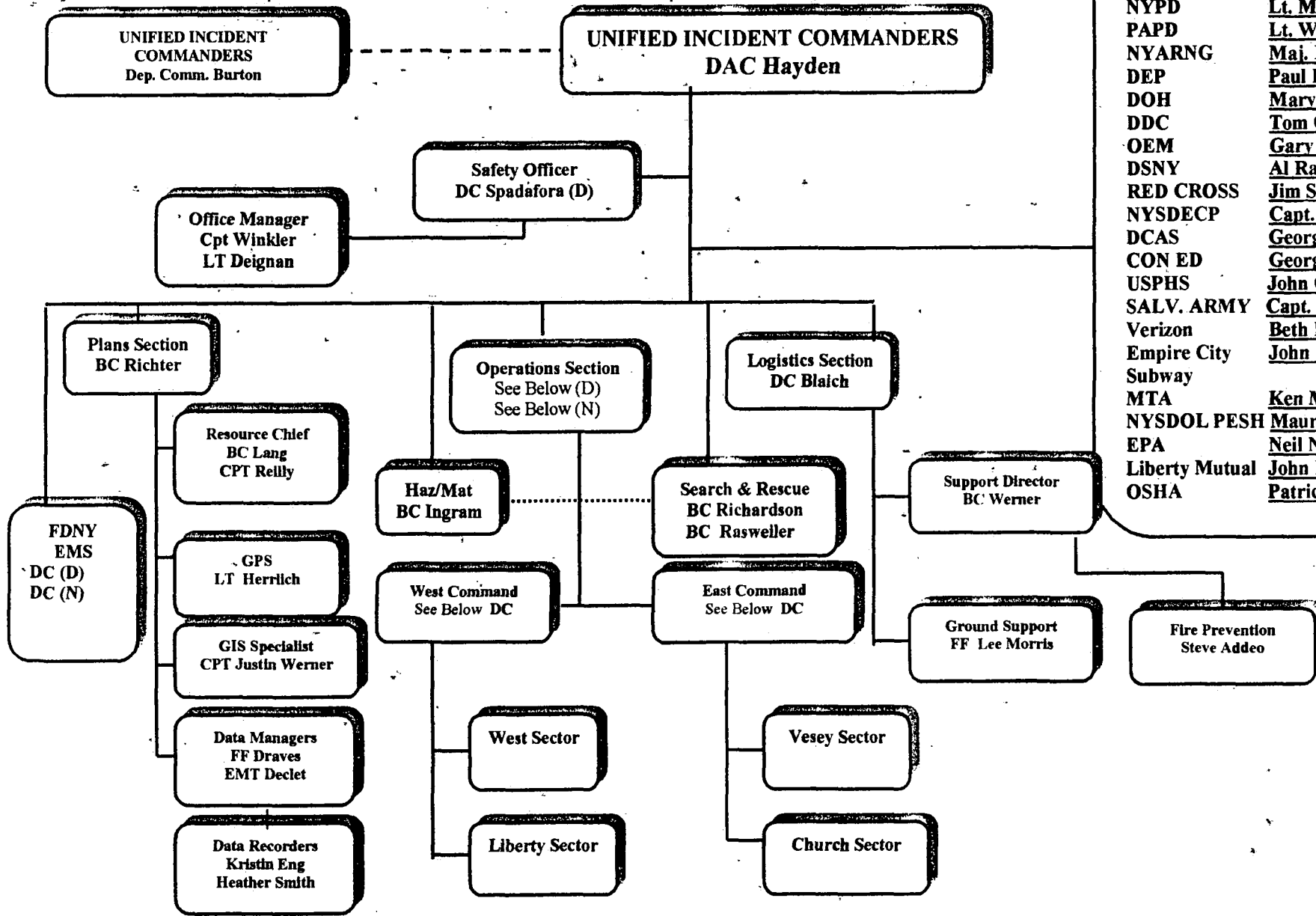


Maintain
50 Foot
Distance

- ⊕ Recently a member working at the site was injured when rivots sheared off of a piece of steel that was being picked from the pile and struck the member causing member to be hospitalized.
- ⊕ All Uniformed Members and Construction Workers shall observe the Circle of Danger and remain 50 ft. from all working grapplers and cranes.

12/18/01

WTC ORGANIZATIONAL CHART



Cooperating Agencies	
Agency	Representative
NYPD	<u>Lt. McArdle</u>
PAPD	<u>Lt. Winslow</u>
NYARNG	<u>Maj. Ray Lamboy</u>
DEP	<u>Paul Bennet</u>
DOH	<u>Mary Perrin</u>
DDC	<u>Tom O'Connor</u>
OEM	<u>Gary Hearn</u>
DSNY	<u>Al Rahner</u>
RED CROSS	<u>Jim Stumph</u>
NYSDECP	<u>Capt. Revella</u>
DCAS	<u>George Frangoulis</u>
CON ED	<u>George Greenwood</u>
USPHS	<u>John Gochnauer</u>
SALV. ARMY	<u>Capt. D. Matthews</u>
Verizon	<u>Beth Drohan</u>
Empire City	<u>John Roesch</u>
Subway	
MTA	<u>Ken Mooney</u>
NYSDOL PESH	<u>Maureen Cox</u>
EPA	<u>Neil Norrell</u>
Liberty Mutual	<u>John Rabovsky</u>
OSHA	<u>Patricia Clark</u>

WTC Task Force	Tour 1	(D)	0700 - 1900	Operations Chief	AC
	Tour 2	(N)	1900 - 0700	Operations Chief	DC -

12/18/01**FDNY – WTC ORGANIZATIONAL LIST**

FDNY	Duane St. Command Post
NYPD	Lt. McArdle
NYPD-PBMSD.I.	John Codiglia
PAPD	Lt. Mark Winslow
PAPD Veh. Rec.	Lt. Brian Tierney
OEM	Gary Hearn (0600-1800)
	John Messina (1800-0600)
DEP	Paul Bennet or acting
DOH	Mary Perrin
DDC 0500-1400	Tom O'Connor
	Tom Amoia
	Ed McGinley
1300-2200	Lou Mendes
	Joe Deluca
2100-0600	Charlie Kaczorowski
DDC SAFETY	Bob Adams
NYSDECP	Capt. T. Revella
DSNY	Al Rahner
RED CROSS	Bob Bonzick
NYCSO	Lt. Scali
NYARNG	Major Thomas Kilmartin
	Major Ray Lamboy
	CW4 Ron Robinson
DCAS	George Frangoulis
CON ED	George Greenwood
USPHS	Ronald Herring
SALV. ARMY	Capt. Dan Matthews
VERIZON	Beth Drohan
	Dan Lynaugh
EMPIRE CITY	John Roesch
	Sandra DiBernardo
MTA	Emergency
	Ken Mooney
	John Ferrelli
	Mike Fradua
NYDOL PESH	Maureen Cox
EPA	Neil Norrell
EPA	Cylinder Recovery
Liberty Mutual	John Rabovsky
OSHA	Pat Clark
NYC DOT	Frank Coniglio
	Brendia Rivera

PII

ITEM	DESCRIPTION	ACTION BY	STATUS
1.	GPS SYSTEM IS UP AND RUNNING ON ALL TRUCKS. SHOULD REMOVE PAPER SYSTEM WITHIN 2 WEEKS. GPS ON TUG BOATS IS BEING TESTED. WILL BE ISSUING A POLICY FOR THE OPERATIONS PERSONNEL TODAY 12/14. WORKING THROUGH SOME PROTOCOL ISSUES.	DDC	OPEN
2	152 TIE-BACKS ARE INSTALLED.. THERE IS TENSION ON 131 TIE-BACKS. REVISED BID DATE OF 12/27.	BOVIS/AMEC	OPEN
3	A SERIES OF MEETINGS HAVE BEEN OCCURRING WITH TULLY/TRANSIT AUTHORITY/RINALDI FOR THE COORDINATION OF A PROGRAM FOR DEBRIS REMOVAL FROM THE 1/9 TUNNEL AT WEST BROADWAY. NO WORK WILL BEGIN UNTIL BUILDING 5 IS COMPLETED, WHICH SHOULD BE AFTER 1/1/02. AWAITING SCOPE OF WORK FROM T/A.	TULLY	OPEN
4	DEBRIS REMOVAL AND SHORING OF BANKERS TRUST IS ON-GOING. OWNER IS MOBILIZED IN THE BUILDING FOR WINTERIZATION. VERIZON TO INSTALL ANALOG LINES FOR LZA - T/T ASAP. VERIZON IS TRYING TO HAVE LINES UP BY 12/21. TULLY TO PROVIDE A MORE DEFINED SCOPE OF WORK AND SCHEDULE.	TULLY	ON-GOING
5	WORK ON THE AUXILIARY CHILLER ROOM IS COMPLETE. MOST OF THE ROOF IS OFF OF THE MAIN CHILLER ROOM. REVISION HAS BEEN ISSUED. THERE IS TO BE NO BURNING EXCEPT FOR THE BOLTS.	DDC	OPEN
6	30 WEST BROADWAY SCHEDULED TO BE COMPLETED BY DECEMBER 15, 2001. TURNER TO DEMOBILIZE SITE DURING LAST 2 WEEKS OF DECEMBER. SCAFFOLD SHOULD BE DOWN BY THE END OF THE WEEK. NEED TO REVIEW HOW AND WHEN WE ARE GOING TO TURN BUILDING OVER.	TURNER	ONGOING
7	CON-ED TO LOOK AT DAMAGE THAT ELECTRICAL VAULTS BY 30 WEST BROADWAY INCURRED AND REPAIR THEM.	CON-ED	OPEN
8	NEW REPORT FOR SIDEWALK SHEDS & NETTING HAS BEEN ISSUED. WHEN SIGNING SIDEWALK BRIDGES OVER, PLEASE CONTACT DAN ESCHENASY SO THAT PROPER PAPER WORK IS WRITTEN UP.	4 PRIMES	OPEN
9	TURNER IS COMPILING "AS-BUILT" SCHEDULE. TURNER ISSUED DRAFT ON FRIDAY 12/14. COMMENTS ARE DUE BACK ON TUESDAY 12/18.	TURNER/PRIMES	OPEN
10	TULLY TO MEET WITH VERIZON AND CON ED TO DISCUSS WORK ON WEST STREET. SHOULD HAVE A MORE DEFINITE PLAN BY FRIDAY'S UTILITY MEETING.	TULLY	OPEN
11	PORT AUTHORITY HAS SUBMITTED A PLAN FOR REMOVAL OF VEHICLES IN BUILDING 6 TO THE FDNY. LERA WILL BE MAPPING OUT LOCATIONS OF VEHICLES. VEHICLES WILL BE REMOVED ONCE DEMO OF BUILDING 6 IS COMPLETED.	PORT AUTHORITY	OPEN

12	THERE WILL BE A MODIFICATION IN THE SITE LOGISTICS PLAN AND THERE WILL ALSO BE A REVISION OF THE EMERGENCY EVACUATION PLAN. SIRENS HAVE BEEN INSTALLED AND FINALIZED MODIFICATIONS TO BE RELEASED ON FRIDAY 12/21.	FD/DDC	OPEN
13	DUST SUPPRESSION EFFORTS NEED TO BE IMPROVED.	4 PRIMES	OPEN
14	DEP REQUESTED FDNY WEST COMMAND BE RELOCATED TO GAIN ACCESS TO THE TIDE GATE. PROPOSED LOCATION, IS THE TRUCK RAMP. PAPD HAS NO PROBLEM WITH THIS LOCATION. AWAITING APPROVAL OF THE FDNY. <i>(Moving further down West St towards Liberty.</i>	DDC	OPEN
15	ALL UTILITY WORK TO BE PERFORMED WITH IN RED ZONE MUST HAVE DDC WRITTEN APPROVAL FROM LOUIE RUEDA	CON-ED/VERIZON	OPEN
16	PARKING RESTRICTIONS HAVE GONE INTO AFFECT ON WEST STREET. OEM/DDC TO EVALUATE POSSIBLE PARKING SOLUTIONS. UPDATE NEXT WEEK.	OEM/DDC	OPEN
17	DDC IS EVALUATING CONSOLIDATION PLAN FOR CM'S. BOVIS AND AMEC WILL BE TAKING THE LEAD. SHOULD BE WORKED OUT BY THE END OF DECEMBER.	DDC	OPEN
18	ANY SUB-GRADE ENTRIES INCLUDING UTILITY WORK HAVE TO BE REPORTED TO BOB ADAMS AND THE FIRE DEPARTMENT.	DDC	OPEN
19	ROAD PLATING NEEDS TO BE PINNED DOWN BEFORE THE SNOW STARTS. SIGNS SHOULD ALSO BE PLACED AROUND THEM. DDC TO REVIEW WHERE WORK IS STILL REQUIRED.	CON-ED/VERIZON	OPEN
20	LIBERTY STREET PEDESTRIAN ACCESS PATH TO BE IMPLEMENTED BY TULLY.	TULLY	OPEN
21	* DOT TRUCKS WILL BE USED. MORE DETAILS TO FOLLOW.		OPEN
22	STEEL ON FLAT BEDS MUST BE TIED DOWN WHEN COMING OUT OF THE HOLE.	PRIMES	OPEN
23	EACH PRIME SHOULD LOOK AT THEIR SCAFFOLD STATION AND MAKE SURE THAT THEY ARE SECURE.	PRIMES	OPEN
24	* TEST RUN OF BUSES DOWN CHURCH STREET HAS OCCURRED. PERMANENT BUS SERVICE MIGHT BEGIN NEXT WEDNESDAY, 12/26. <i>WILL BE ACTIVE 12/26 @ 6am - EXPRESS BUSES</i>	OEM/DDC	OPEN
25	WEEKS REPORTED NUMBER OF BARGES ARE PRESENTLY ADEQUATE.	WEEKS	OPEN
26	WE ADVISE WORKERS THAT WE ARE STILL IN COMPLIANCE WITH OSHA.	PRIMES	OPEN

12/19/01@ 9:00 AM

27	* FALL PROTECTION HAS TO BE IMPROVED. LIFE LINES SHOULD BE APPROVED BY ENGINEERS.	PRIMES	OPEN
28	* ANY TYPE OF WORK DONE ON STREETS HAS TO BE REPORTED TO THE CALL CENTER (800) 272-4480.	PRIMES	OPEN
29	DDC TO REVIEW HOLIDAY WORK PLAN ON FRIDAY.	DDC	OPEN

Dec 24 7pm

Dec 26 7am

Reduced (NO DEBRIS REMOVAL OFFS ITE)

2 GRAPPLER

2 yokes

NO BURNING

NO TRUCKING

WASH DOWN STATIONS

(skeleton crew of iron workers & ENGINEERS)

NO PIER OPERATIONS

