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MEMORANDUM FOR THE RECORD

Type of event: Interview of Brenton C. Greene

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Special Access Issues: None

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Team Number: 8

Location: National Communications Systems (NCS) Office, Arlington VA

Participants - Non-Commission: Brenton C. Greene, Director NCS, Mark Warner, DHS
Counsel

Participants - Commission: Emily Walker

Commission staff interviewed the Director of the National Communications System (NCS) who was director on September 11, 2001 and directed the NCS operations

BACKGROUND:

The mission of NCS, which has been recently moved from Department of Defense (where it was on 9-11) to Department of Homeland Security (DHS), is to "assure the nation's telecommunication backbone." It is to help in the exercise of telecommunications functions and responsibilities in wartime and non-wartime emergencies, and coordinate the planning for and provision of national security and emergency preparedness communications for the Federal Government under all circumstances, including crisis or emergency, attack, recovery and reconstitution. NCS was established in 1963 under President Kennedy and has gone through a significant change in 1982 with the divestiture of AT&T into the regional Bell companies. That is when NCS developed relationships with the industry leaders who own and operate the telecommunications backbone. NCS has developed partnerships with the main carriers in the United States from which seven companies have provided staff who are stationed at NCS (AT&T, MCI, Sprint, Verizon, Bell South, SBC, and Quest). As a result, the industry knows exactly what NCS does and these relationships make operations during a crisis such as 9-11 significantly smoother. NCS staff numbers 100 and thus the partnership with the industry becomes even more critical. 23 Government agencies that have telecom assets partner with them and 8 agencies have full-time employees dedicated to NCS. They also have an industry forum that meets weekly to discuss issues and coordinate efforts to secure the backbone of telecommunications in the country. NCS has military reservists at its call and mobilizes them when there is need for assistance in telecommunications restoration.

The NCS user community starts with the office of the President of the United States moves through NCS member organization, the rest of the Federal Government, State

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Governments, Local Governments, and finally Industry and NGOs. The users are prioritized in advance of an event and there is a plan of action for what to do if telecom is disrupted in each user group. The FCC is the regulator of the telecommunications industry. It lays out the rules and order and priorities. NCS is responsible for communications recovery.

There are three main programs of NCS. The first program is the GETS (Government Emergency Telecommunications Service). This service is a special telecom linkage during an emergency. Eligible people are given cards with a specific number to dial to use in the event of an emergency as a telephone connection. The institutions given these cards are sponsored by a Government agency. The FCC has set a rule that the line for GETS is always on. There is a software feature built into the systems across the country to allow this line to exist. All users do is to dial a number and put in a pin. GETS cards were given out prior to 9-11 to about 20,000 users. In May of 2001, this number was reached. Since 9-11 an additional, 45,000 cards were issued, including a large number to Wall Street through the Treasury Dept. recommendation. The largest growth area for GETS cards has been industry and state and local governments. The GETS system does NOT exist for wireless communication. In 1992-93, the wireless was not a priority but it evolved over the years but the GETS program for wireless was not funded. It is now being funded and is in the testing stages. On 9-11 over 1500 key personnel made GETS calls with over 10,000 calls made at a 95% completion rate in DC and the WTC area.

The second main program of NCS is the Telecommunications Service Priority Program (TSPs). This program has two parts: restoration and provisioning. Restoration priority is who is first in line to get their problem fixed in an emergency. Provisioning priority is priority related to installing new services in a shorter than normal time (although not for reasons of poor planning). TSPs register vital circuits (NOT USERS) for priority repair or installation. It has the circuits across the country ordered in highest priority for the functioning of the telecommunications system in the country. Key circuits identified pre-9-11 included those identified by the Federal Reserve and many were on Wall Street that helped with the smooth restoration of the stock market operations. The FCC identifies the general priority scheme and individual agencies identify the users who have priority. The list of priority circuits depends on the nature of the issue. They could be priority for local communications, priority for Government operations, and priority for global communications. It all depends on the event. On 9-11, Verizon had the list of priority restorations and thus was able to move the ball quickly. I saw the list and it was not well organized or easily readable. However, I saw the list post 9-11 that is organized by State and clearly readable. There is significant ongoing work on this prioritization list, but clearly it worked well on 9-11. TSP was vital in accelerating the opening of Wall Street on 9/17. In addition, TSP helped the re-opening of the Bond Markets on Thursday. Also, NCS supported nearly 600 provisioning requests from 46 organizations (include FBI, FEMA, FRB, Port Authority etc) that needed new phones installed.

The third program the NCS is involved in relates to the Continuity of Government (COG). The main communications system of the country must be kept going or no one

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can communicate. There is a separate network linking the National Coordinating Center (NCC) and the major carriers and networks as a backup. This proved its value as a separate link on 9-11 because it coordinated network use between Network Operations Centers (NOCs) while the network was saturated. In the situation where Continuity of Government is put into play, there is a communications system where no one can trace the site of the call on either end. On the 10th of September, miraculously, the SRAS (Special Routing and Access Service) system was turned on for exercise mode and thus it was ready to function on September 11.

Brent Greene came into the post of Director of NCS in April of 2001. On September 11, he was 9/11 Closed by Statute when the planes hit. He left the briefing and went to his COG site where they operated 24/7 to monitor the status of the network and coordinate priorities and repairs. On September 11, 2001, the National Coordinating Center¹ of the NCS was activated at 8:48 am. It supported the response and recovery efforts at five sites. There was a daily interagency teleconference when NCS gave an update on the telecom issues. There were daily calls with NCS industry partners. CEOs of the telecom industry were calling Brent Greene directly asking what to do and asking for support (e.g. MCI needed generators). GETS cards were distributed to Wall Street through the BITs group. SRAs was already in exercise mode and operational. And NCS inventoried, tracked and applied assets and services offered by industry and Government agencies. GETS was kicked into gear within the Government, but it was not used in NYC because you had to have a dial tone to use the system and there were few dial tones available in lower Manhattan. (Clearly a weakness of the system and why they are moving to include wireless). Military reservists were called up in California, New York, Philadelphia and Boston in case of other events. NCS coordinated entrance into the Ground Zero site by telecommunications repair people who could not figure out easily the procedures for badging that changed regularly during the days surrounding 9-11. NCS also hosted an Information Sharing and Analysis Center (ISAC) summit with telecom, financial, IT, Transportation, Energy and Electric ISACs. NCS also coordinated industry cell phone donations and distribution, refueling of generators for telecom units, laser communications link, free pay phones, and the Cellular on Wheels brought into downtown Manhattan to bolster bandwidth.

The telecommunications issues of 9-11 were numerous. First the immediate impact of the damage to the two towers collapsing was the loss 300,000 lines. In addition, the call volume exceeded anything ever seen. A normal worse case business day is 1X. 8X is the maximum call load the system can absorb. On 9-11, the call demand as 12-14X. This was for landlines. Cellular infrastructure was much less developed and it is not as resilient or robust as landlines. Cell phones operate on two levels: the control channel and the active channel. The control channel is over-engineered and was not saturated on 9-11 (which is why blackberries worked). The voice channel had a finite number of lines and it was over-saturated so the total cell phone could not work.

¹ There is a log of all events at the center that do not include phone calls made to Brent Greene from the White House or CEOs.

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In addition, a beam from Tower 1 fell through building 7 and crashed into the street and broke cable that lost 4 million lines that Verizon had to re-route during the day. Lucent developed a Wireless Emergency Response Team on 9-11.² Forty wireless carriers on wheels were brought in to find cell phones in the rubble. CNN carried a tagline that asked people with loved ones who had a cell phone to call in their number so that the wireless wheels could see if there was any phones emitting signals from under the rubble and perhaps they could find survivors. This program is now a regular feature of disaster recovery but had not previously been used.

The Office of Science and Technology at the White House, Richard Russell, called regularly and said that the restoration of Wall Street was a priority. The decision not to get the market up and running on Thursday, Sept. 13, was due to the impossibility of getting all players up and running. Brent Greene said that Harvey Pitt felt that he did not want to bring up some of the markets and not all of them (which Pitt confirmed in an earlier interview). Friday, Sept. 14, may have been possible from a telecommunications standpoint, but there was not adequate time to test the services. The testing occurred on Saturday and Sunday and the NCS was monitoring the entire process. NCS was on the telephone during the meetings with the NCS at Bear Sterns and Credit Suisse First Boston (CSFB) during the week.

While Brent Green said that many things went well on September 11, they learned many things from the experience and a variety of changes have been put in place or accelerated. First, NCS is working on a Wireless Priority Service Program similar to the landline program. (This program will balance need for lines for customers and lines for priorities in an emergency). They are improving the Cyber Warning Information Network. They have a backup Dial Tone program pilot for Federal Government buildings. They have a Global Early Warning Information System pilot program. They are expanding GETS and TSP. They have increased their outreach training across the country. They are examining interdependencies between Government agencies and their industries and telecommunications.

Mr. Greene noted that some companies and agencies are more responsive than others to the training and changes in procedures to shore up the backbone of telecommunications in our country, even in light of the 9-11 experience.

Attachments:

September 11, 2001 NCS Roles during the Attack on America
The National Communications System
Folder with NCS materials including the Annual Report

² Karl Rausher of Lucent in DC developed this system