

Donna Matrazzo The Writing Works

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U.S. Geological Survey in conjunction with KPIX-TV, Channel 5, San Francisco California Earthquake Authority 1906 Earthquake Centennial Alliance FEMA Northern California Chapter of the Earthquake Engineering Research Institute

"SHOCK WAVES: 100 Years after the 1906 Earthquake"

Final Script

"SHOCK WAVES: 100 Years after the 1906 Earthquake"

FADE IN:

1. A sepia-tone re-creation of Alexander McAdie's 1906 nighttime routine -- setting out earthquake-recording items on his bedside table: A man's hands (maybe wearing a flannel nightshirt), open up a watch and set it on the table next to the bed. Next to the watch he sets out a datebook/notebook; it's opened to the date April 17, 1906. He sets a pencil on top of the notebook. Then he picks up a flashlight, checks it by turning it on and off, and places it next to the other items.

MUSIC: A subtle piece with a feeling of the times <u>UP AND UNDER</u>

DANA KING: (voiceover)

Alexander McAdie, official earthquake forecaster for the U.S. Weather Bureau, had a nighttime routine.

VOICE OF ALEXANDER MCADIE:

(voiceover)

"For 20 years I have timed every earthquake I have felt.

"My custom was to sleep with my watch open, note-book open at the date, and pencil ready -- also a hand electric torch.

"These were laid out in regular order."

2. The light in the room goes out. Perhaps there is a glimmer of moonlight on the watch. Maybe it's 11:00.

match dissolve to:

3. The table and the items on it shaking, visible just in the glimmer of moonlight. Alexander's hands reach over for the flashlight and turn it on, pick up the pencil, hold up the watch and write down the time in the notebook: 5:12 am.

MUSIC: Segues to a fast-paced, frantic sound UP AND UNDER

SFX: A scream coming from a distance away. A siren wailing.

<u>dissolve to:</u>

A WILD-FEELING SEQUENCE TO GIVE A SENSE OF THE SHAKING AND PANDEMONIUM -- PROBABLY CREATED THROUGH FRACTIOUS EDITING OF HISTORIC IMAGES WITH PERHAPS SOME RE-CREATED LIVE-ACTION FOR INTENSITY OF IN-YOUR-FACE MOVEMENT. THESE "DEVASTATION COLLAGES" ARE INTERSPERSED WITH QUICK SHOTS OF ALEXANDER MCADIE RECORDING THE TIMES OF THE NEXT AFTERSHOCKS

For example:

4. A collage of historic images of buildings collapsing, streets ripped apart, maybe accompanied by live-action of dishes flying past and crashing, and so forth.

SFX: The crash of breaking china, the wham! of falling walls, the thundering of falling bricks ...

5. Alexander's hand, now wearing a dress shirt but without cufflinks, writes down the aftershock's time: 5:20.

6. Another collage of historic images of buildings half gone, roofs with gaping holes, the skeleton of chimneys and so forth, maybe accompanied by live-action of pieces of collapsing bricks filling the screen.

SFX: A child crying, the quick snapping of wooden building posts, the rattling of roof tiles ...

7. Alexander's hands finish attaching cufflinks to his shirt cuffs; he writes down this aftershock's time: 5:25.

8. Another collage of historic images of trees snapped off, a street full of building rubble, twisted trolley tracks, shattered store windows, and so forth, maybe accompanied by live-action of a chandelier swaying.

SFX: The crash of breaking glass, the straining sound then crash of masonry, another scream ...

9. Alexander's hand, now wearing a jacket over the shirt, writes down the aftershock's time: 5:42. He picks up the watch, shuts its case, and squeezes it tightly in his hand, as though thinking about all that he's going to have to face.

MUSIC UP AND OUT

SFX: A haunting, rumbling, destructive-type sound <u>UP</u>

<u>dissolve to:</u>

10. DRAMATIC ANIMATION -- A COMBINATION OF GEOLOGY AND MAPPING reveals the on-the-ground destruction of the earthquake rupture for its length of nearly 300 miles. [Note: Lind Gee suggested that we might foreshadow the Missions here, so if they still exist we might show them as they lie in the path of destruction.]

SFX UP AND UNDER

<u>DANA KING</u>: (voiceover) The temblor of April 18, 1906 came out of the sea just offshore from San Francisco.

Moving northwest and southeast at more than 7,000 miles an hour ...

... it had an explosive power equal to more than seven million tons of T-N-T.

dissolve to:

11. Dana King on camera, at a location other than downtown San Francisco. Perhaps she can be in a place with a recognizable fault line.

DANA KING: (on camera)

People think of April 18, 1906, as the great "San Francisco" earthquake and fire.

But it was really a <u>northern California</u> earthquake, ripping apart the earth over a distance of nearly 300 miles.

The earthquake was felt as far north as Coos Bay, Oregon. As far south as Los Angeles. As far east as central Nevada an area of nearly 200,000 square miles.

It was registered on seismographs around the world, including London, Tokyo, Moscow, and Cape Town, Africa.

SFX: The haunting, rumbling sound UP AND OUT

<u>dissolve to</u>: 12. A stylized image from the animation in Scene 10. TITLE: SHOCK WAVES 100 Years after the 1906 Earthquake

dissolve to:

13. A quick montage of scenes from contemporary earthquakes around the world, like the Kobe scenes -- buildings swaying and collapsing, trains overturned, items flying off shelves inside a room, great scenes of devastation.

SFX: Natural sounds from these events

DANA KING: (voiceover)

Earthquakes are one of the deadliest of

all natural disasters ...

and one of the hardest to predict.

Volcanoes typically show signs of unrest.

Earthquakes strike without warning.

How can scientists learn to predict ... the

precise time,

place and magnitude of an impending earthquake?

dissolve to:

14. Dana King on location, the same as Scene 11.

DANA KING: (on camera)

In the hundred years since the great Northern California quake, science has made astounding progress in understanding how to answer those questions.

dissolve to:

15. Mary Lou Zoback at Lick Observatory, or a location out in the field. Lind Gee suggests along the San Andreas on the Peninsula, possibly Crystal Springs. **Title:** Dr. Mary Lou Zoback (job title), USGS

<u>MARY LOU ZOBACK</u>: (on camera) (*interview*; *something like* ...) In 1906, little was known or understood about earthquakes. Scientists didn't even know how they occurred.

16. Historic image or footage if there are any missions still around.

MARY LOU ZOBACK: (voiceover) (*interview*; *something like* ...) The earliest records of California earthquakes were made by padres running the missions. 17. A map showing the string of Catholic missions throughout California in the 1700s.

The Catholic missions ran south to north, throughout California.

18. A close shot of some of the records kept by the padres if something still exists, or re-creation of hand writing on parchment.

The padres were incredible recordkeepers, and theirs were really our first seismographic records.

19. Again, a close shot of a Gold Rush earthquake record if something still exists, or re-creation of hand writing on paper.

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Later, there were records from the diaries of people during the Gold Rush

20. A historic image of these soldiers.

... and soldiers stationed at Alta.

21. Perhaps there are images of these instruments.

Official seismic recordings began with a series of ten seismographs, deployed in 1887 by the University of California at Berkeley.

22. Perhaps there's an image of the actual Lick seismograph.

One, out of date by 1906, was located at Lick Observatory.

The April 18th quake knocked the needle off the scale.

dissolve to:

23. Similar to Scene 1: Alexander McAdie is setting up his earthquake-record system next to his bed.

Earthquake record-keeping had been taken over by the U.S. Weather Bureau.

Alexander McAdie was the Bureau's official forecaster in April, 1906.

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To see the complete script, contact me at matrazzo@msn.com