



LM OTERO Associated Press

**FIREFIGHTERS SEARCH** an apartment complex leveled by a blast at a fertilizer plant in West, Texas. The explosion caused an unknown number of fatalities — but 11 first responders were killed — and injured at least 160. A potent chemical is suspected in the blast. **A20**

## Blast stuns, shatters Texas town

By CINDY CARCAMO, JOHN M. GLIONNA AND RICK ROJAS

WEST, Texas — Alicia McCowan had just finished her shift at the Sonic drive-in when the blast erupted nearby, leveling buildings in a wide circle. Above, a mushroom cloud bloomed against a yellow-pink sky.

She knew the source —

the West Fertilizer Co. plant, close to the apartment where a baby sitter was watching her two young sons.

She rushed to the damaged apartment building and screamed her kids' names. She found Brayden, 4, dragging Kaegan, 2, down the stairs, and both were OK. But where was their baby sitter?

"Mommy, she was in your bed looking at the window and then the top of the house fell

on her," Brayden told her.

In the tiny town of West on Thursday, searchers continued to pick through the wrecked buildings for victims of the explosion. Authorities confirmed that there were fatalities but did not offer a precise number.

The State Firemen's & Fire Marshals' Assn. of Texas said 11 first responders were dead — five from the West Fire Department, one from

the Dallas Fire Department, four Emergency Medical Services personnel and one unknown. Eleven West firefighters were in the hospital.

More than 160 people were injured in Wednesday's blast. McCowan would later learn that her baby sitter was among those hospitalized.

On an ordinary Thursday in this community of 2,800 in north-central Texas, hun-

dreds of people would be gathered for a weekly cattle auction, but it was canceled and the auction grounds swamped by TV news satellite trucks.

Nearby, donations were piling up — groceries, paper towels, diapers. One family drove 100 miles to offer donations. Restaurants invited people in to eat free, schools sheltered people with no [See **Explosion**, A18]

## S.F. to retrofit units at risk in quakes

About 3,000 wood-frame apartment buildings will be reinforced in broadest such effort in state.

By RONG-GONG LIN II

Some of the most extensive damage and loss of life from recent earthquakes in California has occurred in apartment houses where dwellings sit on top of a ground-level parking garage or a storefront. The shaking undermines the bottom floor, causing the buildings to collapse and in some cases to pancake.

After years of study and debate, San Francisco on Thursday formally adopted a new law requiring owners to retrofit thousands of these so-called wood-frame soft-story buildings, marking the most sweeping seismic regulations in California in years.

City officials estimate the cost of retrofitting will be \$60,000 to \$130,000 per building.

Structural engineers have long warned that these ubiquitous structures face a particular risk for collapse during a major earthquake because the garage must carry the weight of the apartments above. Efforts at mandatory retrofitting, however, have largely failed both in local city councils and the state Legislature because property owners have balked at the costs.

When the Loma Prieta earthquake rocked the Bay Area in October 1989, the ground floors of several multi-story apartment buildings crumbled in San Francisco's Marina District. The shaking sparked fires that devastated neighborhoods.

In January 1994, the Northridge earthquake caused the Northridge Meadows apartment building to collapse. Sleeping residents were crushed in their beds, and 16 died.

After Northridge, the Los Angeles City Council discussed mandatory retrofitting for soft-story apartments. Hal Bernson, the city councilman who proposed it, said in an interview that property owners fought him "tooth and nail." In the end, the proposal died.

Some landlords in Los Angeles remain firmly opposed to the type of retrofitting now required in San Francisco. Dan Faller, president and chief executive of the Los Angeles-based Apartment Owners Assn. of California, said he does not believe the government [See **Retrofit**, A16]

### COLUMN ONE

## Taking notes in pajamas

A reporter enrolls in a massive open online course (MOOC). A good seat? Bookstore lines? Not a concern.

By LARRY GORDON

The public health class got ready for its first lecture:

Attending were the pharmacist from Pakistan, the psychologist from Brazil, the dietitian from Louisiana, the journalist from Los Angeles — and 4,500 other people.

It's a good thing we didn't have to hustle for a decent seat. This classroom was a virtual one.

We communal strangers were among the pioneers in the emerging universe of massive open online courses — MOOCs, as they're called, an acronym that sounds like an insult from my New Jersey childhood.

Instead of lining up at the bookstore, I was fiddling with Internet browsers and deciding how many videos about tuberculosis and droughts I could watch in one late-night stretch. Instead of chatting across the aisle with classmates, I posted group messages online. And rather than gathering nervously en masse for our final exam, we tested in uncertain solitude, at kitchen tables and office cubicles.

I'd chosen professor Zuzana Bic's free five-week Principles of Public Health from UC Irvine because I was interested in the topics and wanted a relatively short class based at a Southern California campus.

It was offered through Coursera, a for-profit organization founded by two Stanford University profes- [See **MOOC**, A13]



**IMAGES FROM VIDEO** show two men walking through a crowd near one of the two explosions in Boston. "We consider them to be armed and extremely dangerous," said an FBI official. Anyone with information is urged to contact the agency.

## FBI seeks public's help in identifying suspects

By MOLLY HENNESSY-FISKE, SHASHANK BENGALI AND ALANA SEMUELS

BOSTON — The FBI appealed for the public's help Thursday in identifying two men wearing baseball caps and backpacks, one of whom was seen placing a backpack at the site of the second Boston Marathon bombing.

As President Obama traveled to the shaken city with a promise that it would "learn to run again," the FBI released photos and a video of two men seen walking through a crowd outside a restaurant near one of the two deadly explosions.

"They appear to be associated," Boston FBI chief Richard DesLauriers said as he detailed the most significant break yet in the investigation into who was responsible for the bombs that exploded Monday near the marathon's finish line, killing three people and injuring



CJ GUNTHER EPA

### Obama: 'We will finish the race'

The president urges Boston and the nation to reclaim the spirit and grace that had been disrupted by Monday's bombing. **NATION**, A12

more than 170.

FBI officials believe they may have captured the planting of one of the crude pressure-cooker bombs outside a crowded restaurant near the finish line. They said an image showed the man — wearing a white baseball cap — depositing his backpack at the scene "within minutes" of the time the second bomb went off, DesLauriers said. The man walked back the way he came, away from the finish line, he said.

The same man is seen in surveillance footage walking a few steps behind a second man, this one dressed in khakis, a black jacket and a black baseball cap. That footage was captured at 2:37 p.m., about 13 minutes before the explosions, a few blocks away.

"We consider them to be armed and extremely dangerous. No one should approach them," DesLauriers said, urging members of the [See **Boston**, A10]

## Gun control options limited

After a Senate defeat, backers of expanded background checks pledge to fight on.

By MICHAEL A. MEMOLI AND MELANIE MASON

WASHINGTON — Supporters of stricter gun laws have organization, money and — after the Senate blocked an expansion of background-check requirements — fury.

What they don't have is a clear path to changing the political arithmetic of the U.S. Congress.

None of next year's Senate races offers a good opportunity to replace a senator who backs gun rights with one who supports tougher laws.

Three senators who voted against expanding background checks face tough elections next year. All are Democrats from rural states that have strong gun-rights traditions: Sens. Mark Begich of Alaska, Mark Pryor of Arkansas and Max Baucus of Montana. If they lose, their replacements almost certainly would be pro-gun Republicans.

To find opportunities to switch a vote by defeating an incumbent senator, gun-control supporters may have to wait until 2016. Several Republican gun rights supporters face reelection that year in states where gun control has strong voter appeal; none fitting that description is on the ballot in 2014.

That electoral map belies some of the optimism for a fast turnaround that gun control supporters expressed after Wednesday's vote. [See **Guns**, A7]

### Effort begins to fix state's jobless fund

Unemployment insurance system, which helps 525,000 jobless Californians, is more than \$10 billion in the red. **BUSINESS**, B1

### UC taking fewer of state's seniors

The odds of Californians gaining admission worsen, while more from out of state are getting in. **LATEXTRA**

**Weather** Sunny and very warm. L.A. Basin: 86/56. **AA6 Complete Index** .....AA2

Printed with soy inks on partially recycled paper.

