

BUT FOR THE BOOMING of heavy rain upon its high roof, the Church of Ognissanti breathed the hush of its centuries that morning—the murmur of matins, the fragile tinkling of altar bells, the dance of candlelight in the cloud-darkened nave.

Suddenly a cry of alarm exploded in the quiet: "*L'Arno è fuori!*—The Arno is out!"

The frightened band of Franciscans—17 priests and brothers—rushed to the front doors. It was 7 a.m. on November 4, 1966, and the agony of Florence had begun.

Across an elegant piazza, angry breakers of foam lashed the concrete wall along the Arno's northern bank. The river had already broken through farther upstream, and a swift brown tide streaked with sediment and oil was rushing toward the priests down Borgo Ognissanti (foldout map-painting, page 10).

Quickly they bolted the heavy wooden doors of the church with a stout iron bar and began carrying pews and confessionals to the broad marble step before the high altar.

While they worked, the Arno swelled over the embankment; the waters pounded against the church doors. The old wood groaned against the grip of the iron. Then, with a crack like a rifle shot, the bar snapped.

"It was as though a huge and angry giant had smashed his way in," Father Costantino, Guardian of Ognissanti, told me as we

Living city of the Renaissance surrounds its domed cathedral in this summer view from Fort Belvedere, before the disastrous flood of last November 4. Today Florence again welcomes pilgrims to its treasures.

ENTACHROME FROM SCALA © N.G.S.



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Florence Rises From the Flood

By JOSEPH JUDGE

National Geographic Senior Staff

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wandered through the ruin a few weeks later. A square-shouldered man in his fifties, he still wore the weariness of the ordeal.

When the doors burst open, a thundering wave swept down the long nave and broke in a torrent of foam against the altar. Oil-black crests clawed at 15th-century masterpieces—Sandro Botticelli's fresco "Saint Augustine," Domenico Ghirlandaio's "Saint Jerome" and "Madonna of Mercy."

One of the priests, Father Pietro, plunged into the cold waters and struggled toward the doors, hoping to force them closed. He was driven back, numbed and exhausted, as the Arno dug at his knees and dragged him down.



Oily handprint of the flood smears a 10-foot-high signpost pointing the way to a museum commemorating Michelangelo and to Santa Croce, a church he knew well.

"This saved me," he said with a self-conscious smile. He held up the end of a long curtain rope that he had clutched and hung onto before his companions fished him back with the help of a cane.

By early afternoon, the Arno had plunged deep into the labyrinth of Florence. A strong tide from the city swept into the church from the opposite direction, and with a final irony slammed shut the very doors the Arno had first broken through.

For days afterward, the priests of Ognisanti looked down from their windows upon the devastation. And all Firenze Bella around them looked like a lake bottom, slimy and reeking, seemingly buried forever.

FIRENZE BELLA. Beautiful Florence, the mother country of Western man. It is fair to say that much of what we know today of painting and sculpture, of architecture and political science, of scientific method and economic theory, we owe to the artists, politicians, statesmen, bankers, and merchants of the Renaissance—that explosion of intellectual and artistic energy in Italy between 1300 and 1600. And Florentines stood at the turbulent center of the Renaissance.

Here the Middle Ages climaxed in the cosmic journey of exiled Dante through Hell, Purgatory, and Paradise; here the wandering Petrarch sang the first sweet notes of modern poetry and inspired Boccaccio to develop the modern prose narrative.

In Florence, Galileo pursued his studies of motion that would lead eventually to Newton and the law of gravity. First man to gaze through a telescope upon the moons of Jupiter and the lunar landscape, Galileo changed forever our concept of the universe.

Here Machiavelli, watching in his own time the tragic progress from autocracy to republicanism to tyranny, left a legacy of political thought that still instructs statesmen.

But Florence's greatest glory was its galaxy of artists—Cimabue and his great pupil Giotto; Masaccio, Uccello, Fra Filippo Lippi, Botticelli, Leonardo da Vinci; the sculptors Ghiberti, Donatello, and mighty Michelangelo; the architects Brunelleschi, Alberti, Michelozzo, to name but a few. Many of their works remain in place in a city essentially unchanged for 400 years.

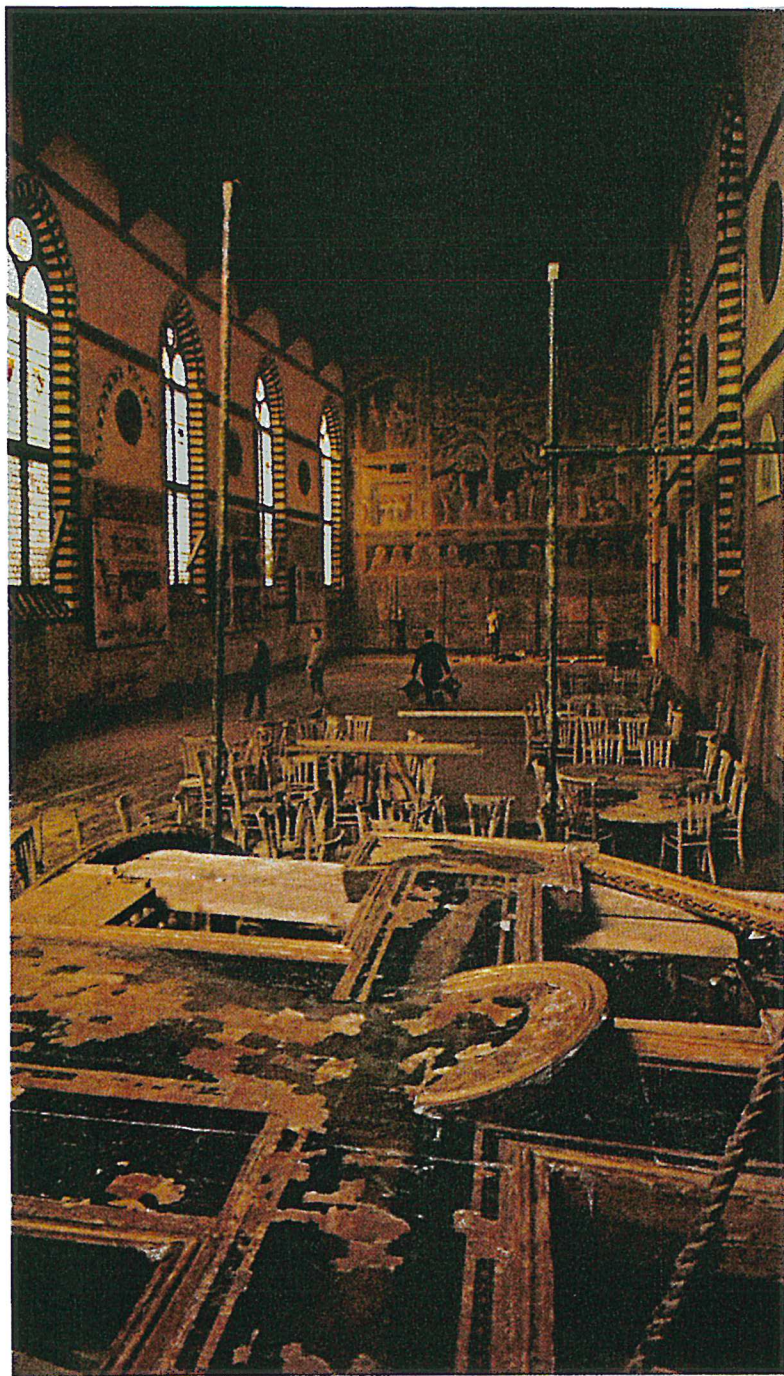
These thoughts of Florence were common to the world on November 4, when the first news of tragedy crackled across continents. At dawn the Arno River had risen from its banks. The sleeping city, an incomparable treasure house of art, had been engulfed in a roaring tide of silt-laden water and fuel oil.

Was it possible? How did it happen? What had been lost? What could be saved?

Those questions were on our minds as a NATIONAL GEOGRAPHIC team—illustrations editor Tom Smith, artist Bob Nicholson, and I—hastily prepared for a sad mission. We went to Florence to record a disaster—little knowing that in the weeks and months to come we would also report a miracle.

Bending to a heartbreaking task, nuns and a student volunteer join in reclaiming Florence. They clean out the sodden wreckage of a religious-articles shop near the cathedral. In one day and night, churning water that struck without warning brought incalculable grief and despoiled one of mankind's richest centers of art. But the Florentines set in motion a miracle of recovery. Today this shop—like most others swamped by the Arno—has reopened.

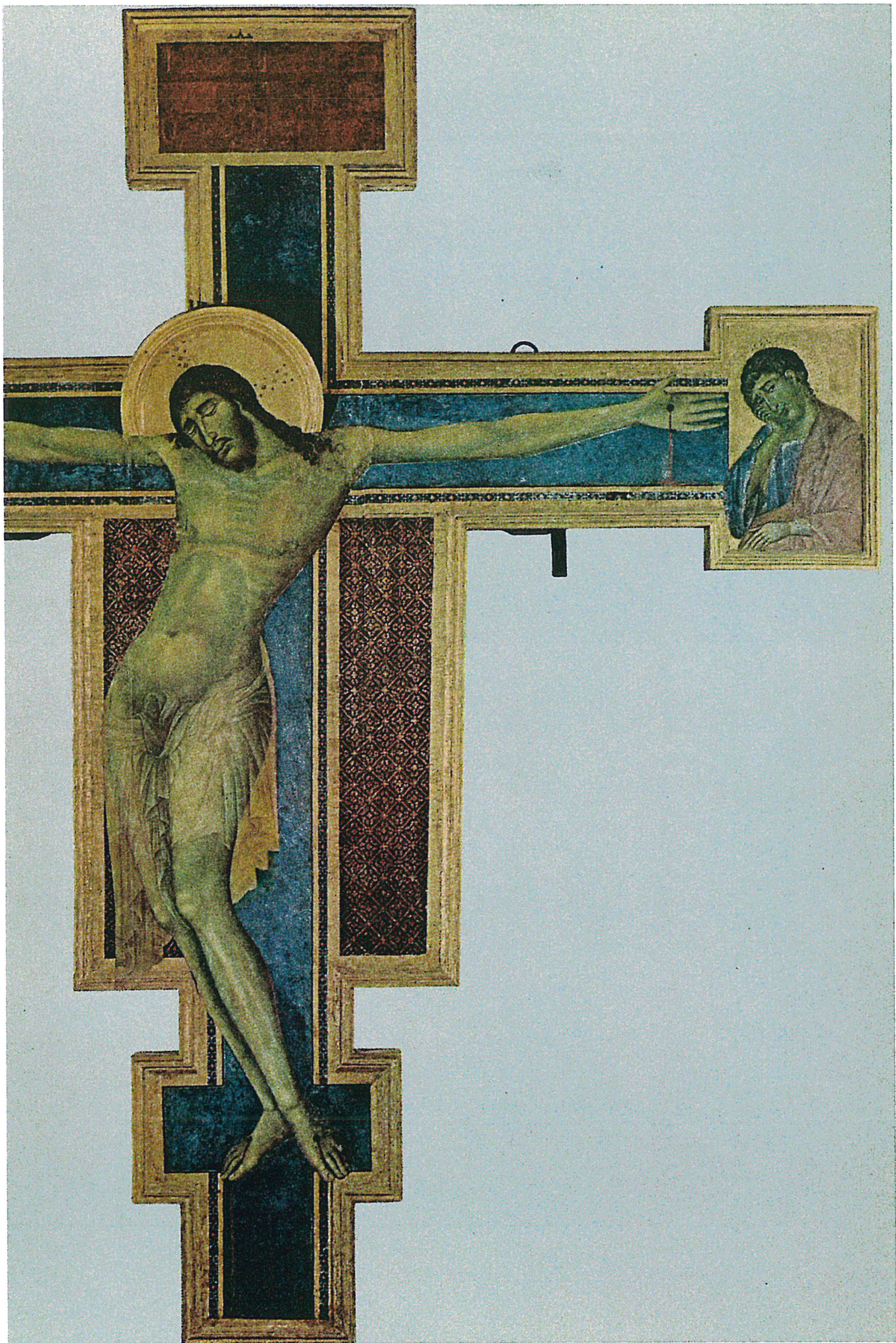




EKTACHROMES FROM MONDADORI PRESS (ABOVE) AND SCALA © N.G.S.

Martyrdom of a masterpiece: Single greatest loss to art, Giovanni Cimabue's "Crucifix" lies damaged beyond repair, in contrast to its appearance before the flood (right). "The father of Florentine painting" portrayed the agony of Christ about 1280 for the Church of Santa Croce, the Westminster Abbey of Italy, whose tombs hold Michelangelo, Galileo, and Machiavelli. Resting on chairs behind the defaced Cimabue, more-fortunate works await emergency treatment in the church's museum. Invading water marked its 20-foot depth on the walls with a greasy film of *nafta*—thick, black furnace oil flushed from the city's fuel tanks. The grease smudges the "Last Supper" of Taddeo Gaddi, bottom panel of the 14th-century frescoes on the far wall.





Monuments from an age of giants, the Cathedral of Santa Maria del Fiore, center, and the octagonal Baptistery, left, draw admiring visitors before the flood. They stand on the site of a Roman town that became Europe's most accomplished city. Florence's scores of churches, palaces, museums, and libraries preserve the genius of the Renaissance—the intellectual awakening of the 14th, 15th, and 16th centuries that bequeathed to Western man new concepts of art, letters, politics, science, and economics.

But the "Miracle of Florence" has now occurred. The city has been cleansed. An extraordinary salvage operation, staffed by hundreds of student volunteers of many nationalities, has reclaimed most of the books. The panel paintings are resting in a special "hospital"; art experts now believe that many feared lost will eventually be saved.

Some, of course, will not. The priceless "Crucifix" of Giovanni Cimabue, revered for 700 years, will never again be seen as it was (preceding pages). Many panel paintings important to the history of art may be beyond salvage. Perhaps the greatest loss of all is the availability of so many thousands of manuscripts and books; even though they have been rescued physically, they will remain out of reach of scholars and historians until final binding, recataloguing, and reshelving—and that may be a matter of many years.

Still, Florence again wears its old and cherished look. By the time the first summer tourists arrived, almost all the hotels and pensions had reopened; the museums and galleries displayed most of their treasures. The damaged shops wore bright new paint, and the craftsmen were back at their workbenches. A tragedy of nature had been turned into a triumph of human courage.

SNOW WHIRLED from a silver sky and the wind turned back the narrow silver leaves of olive trees as we drove from Rome toward Florence in its winter of disaster. Amid the haunting hills of Tuscany, we paused at the ruin of a medieval church; before us a drear landscape of empty highlands receded like washes of tawny water color toward the gray Arno Valley.

Stripped of their forests through the ages, the clay slopes of northern and central Italy turn fluid with the rains of autumn; their pasty debris chokes the beds of rivers, forcing them out of their banks. Thus every winter brings its floods—130 in the past 50 years. And it was



on these once-fertile slopes that last November's fury had risen.

A lone farmer, his narrow back hunched against the cold, climbed a path through the olive grove and greeted us in English.

"The flood? Yes, some will tell you the animals knew," he said. "They say no birds flew in the whole valley the day before, and how could a bird fly through such a rain?"

On November 3 and 4 last year, the Arno watershed received a third of its annual average rainfall in two days. Nineteen inches of rain fell in 48 hours. . . .

It was 7 p.m. on November 3 when Signora Ida Raffaelli heard the mechanical shriek of a siren from Lévane Dam, straddling the Arno



LENTACHROME FROM SCALA © N.G.S.

35 miles upstream from Florence (map, page 16). She and her family, who live in one of four houses below the dam, did not believe that the warning was real. Two hours later the siren sounded again.

"I was appalled to see the gates slowly opening," she later told a reporter, "and immediately an enormous wall of water started coming down the Arno toward us. I screamed to my sister and we ran for our lives."

Why were the gates opened? How much water was released from Lévane's 6,409,000-cubic-yard reservoir? A heated controversy sprang to life in the weeks after the flood. A government commission inquired into the charge that Lévane opened its strained gates

because the operators of a second dam at Penna, farther upstream, failed to open their gates until too late, and then had released more water than Lévane could handle.

This much is certain—enough rain fell on all northern Italy in two days to flood 750 villages and 3,000 miles of highway; to drown more than a hundred people and 50,000 cattle in a wide area from the Po Valley southward. In this national catastrophe, whatever happened at the beleaguered dams in Tuscany may be considered contribution and not cause.

More to the point, perhaps, is the Florentine proverb, "*L'Arno non cresce, se la Sieve non mesce*" (The Arno never rises up, unless the Sieve fills its cup). Before midnight, while

the Arno Valley was filling, the Sieve River was pumping unknown tons of high-velocity sludge through the narrow confluence east of Florence.

The telephone rang shortly after midnight in the home of Lt. Col. Nicola Bozzi, chief of the Florentine *carabinieri*. He had retired early in anticipation of a busy day on the fourth, a national holiday celebrating the 48th anniversary of the Italian armistice in World War I. The city's narrow streets and dozens of piazzas were decked with flags—the red Florentine lily on a field of white, and the Italian tricolor of green, white, and red (right), all drooping now in torrential rain.

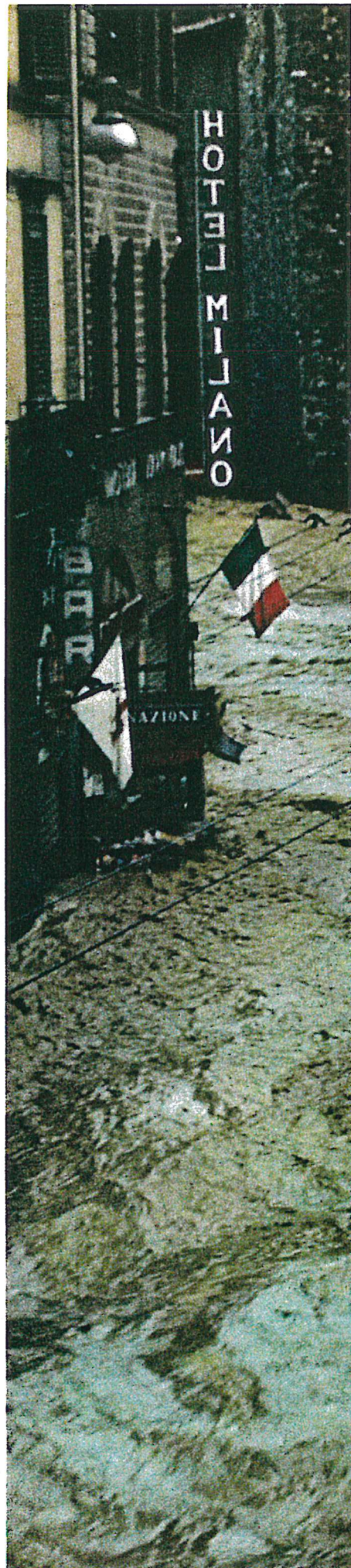
"Pronto!"

It was a distress call relayed from the Valdarno district. The Arno was raging out of its banks. Roads were sinking. Families were marooned on rooftops.

Colonel Bozzi could not have known it, but water was already beginning to trickle into the basements of riverside homes east of Florence. Cats moved away on silent feet. In deserted streets the covers of old sewers began to bubble and bleed thin streams.

(Continued on page 17)

Furious cataracts, laden with rubble, roar through the streets and toss automobiles about like corks. Trapped citizens watch the frightening spectacle from a balcony overlooking an intersection near the cathedral. Anticipating a holiday, most Florentines were asleep when the Arno River surged over its banks at dawn. Within hours, 17 people perished in the city as 11,000 abandoned their homes.



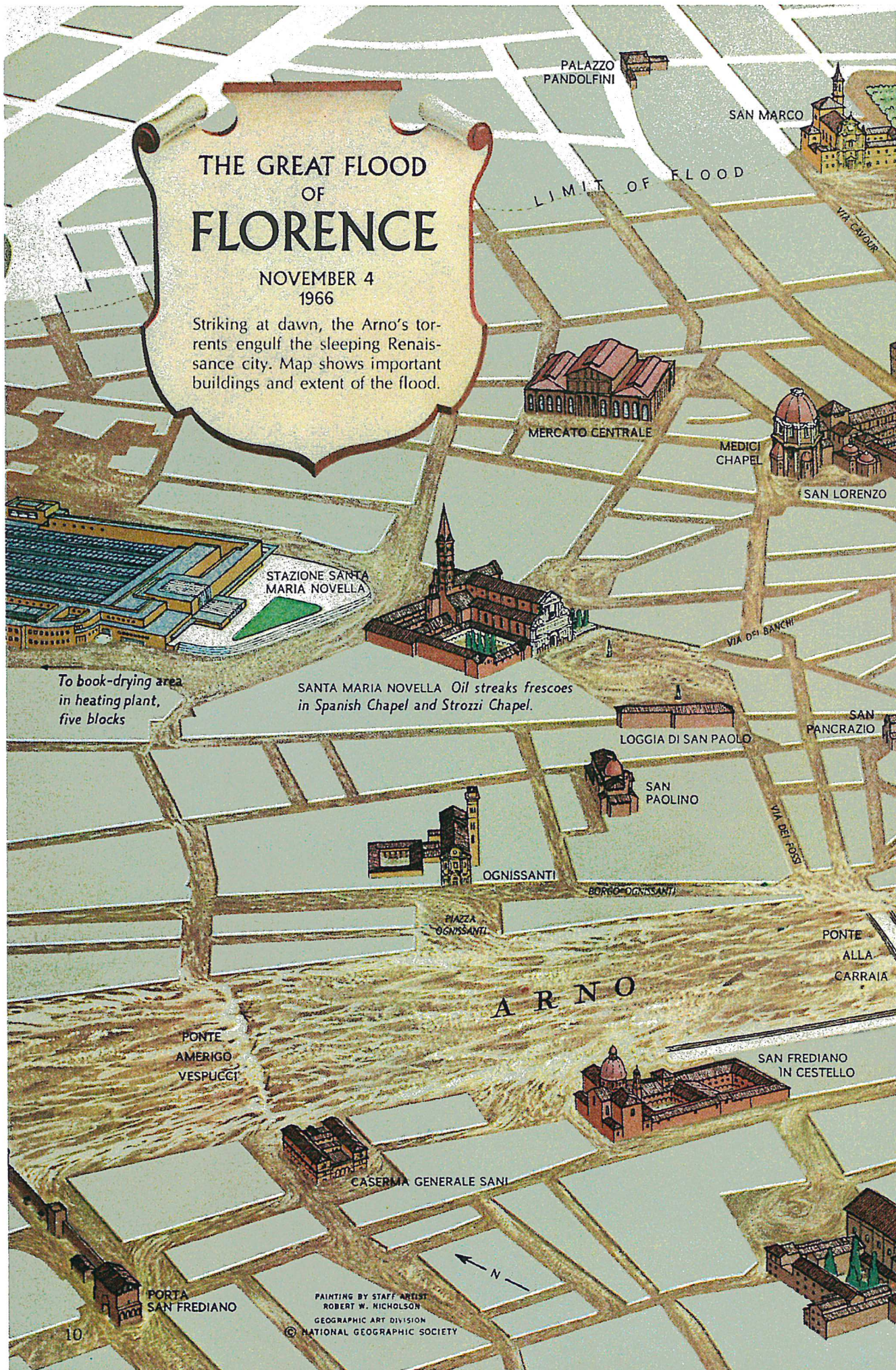
EXTACHROMES BY HOLLY LAPRATT © N.G.S.



THE GREAT FLOOD OF FLORENCE

NOVEMBER 4
1966

Striking at dawn, the Arno's torrents engulf the sleeping Renaissance city. Map shows important buildings and extent of the flood.



To book-drying area
in heating plant,
five blocks

SANTA MARIA NOVELLA Oil streaks frescoes
in Spanish Chapel and Strozzi Chapel.