Israel's war on Gaza among 'most destructive' in recent history



PERSPECTIVE

The Israeli military campaign in Gaza, experts say, now sits among the deadliest and most destructive in recent history.

In just over two months, the offensive has wreaked more destruction than the razing of Syria's Aleppo between 2012 and 2016, Ukraine's Mariupol or, proportionally, the Allied bombing of Germany in World War II. It has killed more civilians than the US-led coalition didinits three-year campaign against Daesh.

The Israeli military has said little about what $kinds\, of\, bombs\, and\, artillery\, it\, is\, using\, in\, Gaza.$ But from blast fragments found on-site and analyses of strike footage, experts are confident that the vast majority of bombs dropped on the besieged enclave are US-made. They say the weapons include 900-kilogram "bunker-busters" that have killed hundreds in densely populated areas.

With the Palestinian death toll in Gaza surpassing 20,000, the international community is calling for a cease-fire. Israel vows to press ahead, saying it wants to destroy Hamas' military capabilities following the group's Oct. 7 rampage that triggered the war, in which it killed 1,200 people and took 240 others cap-

The Biden administration has quietly continued to supply arms to Israel. Last week, however, President Joe Biden publicly acknowledged that Israel was losing international legitimacy forwhathecalledits"indiscriminatebombing." Here's a look at what is known so far about Israel's campaign on Gaza.

How much destruction is there in Gaza?

Israel's offensive has destroyed over twothirds of all structures in northern Gaza and a quarter of buildings in the southern area of Khan Younis, according to an analysis of Copernicus Sentinel-1 satellite data by Corey Scher of the CUNY Graduate Center and Jamon Van Den Hoek of Oregon State University, experts in mapping damage during wartime.

The percentage of damaged buildings in the Khan Younis area nearly doubled in just the first two weeks of Israel's southern offensive, they said.

That includes tens of thousands of homes as well as schools, hospitals, mosques and stores. UN monitors have said that about 70 percent of school buildings across Gaza have been damaged. At least 56 damaged schools served as shelters for displaced civilians. Israeli strikes damaged 110 mosques and three churches, the monitors said.

"Gaza is now a different color from space. It's a different texture," said Scher, who has worked with Van Den Hoek to map destruction across several war zones, from Aleppo to Mariupol.

How does the destruction stack up historically?

outpaced Allied bombings of Germany during

Between 1942 and 1945, the allies attacked 51 major German cities and towns, destroying about 40-50 percent of their urban areas, said Robert Pape, a US military historian. Pape said this amounted to 10 percent of buildings across Germany, compared to over 33 percent across Gaza, a densely populated

By some measures, destruction in Gaza has — territory of just 140 square miles (360 square — around 10,000 civilians, a third of them from kilometers).

"Gaza is one of the most intense civilian punishment campaigns in history," said Pape. "It now sits comfortably in the top quartile of the most devastating bombing campaigns ever."

The US-led coalition's 2017 assault to expel Daesh from the Iraqi city of Mosul was considered one of the most intense attacks on a city in generations. That nine-month battle killed coalition bombardment, according an Associated Press investigation at the time.

During the 2014-2017 campaign against Daesh in Iraq, the coalition carried out nearly 15,000 strikes across the country, according to Airwars, a London-based independent group that tracks recent conflicts. By comparison, the Israeli military said last week it has conducted 22,000 strikes in Gaza.

What types of bombs are being used?

The Israeli military has not specified what it is using. It claims every strike is cleared by legal advisers to make sure it complies with international

Weapons experts have been able to draw conclusions by analyzing blast fragments found on-site, satellite images and videos circulated on social media. They say the findings offer only a peek into the full scope of the airwar.

So far, fragments of American-made Joint Direct Attack Munitions (JDAM) bombs and smaller diameter bombs have been found in Gaza, according to Brian Castner, a weapons investigator with Amnesty International.

The JDAM bombs include precision-guided 450-kilogram and 900-kilogram "bunker-bust-

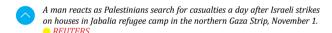
"It turns earth to liquid." said Marc Garlasco, a former Pentagon defense official and a war crimes investigator for the UN. "It pancakes entire build-

He said the explosion of a 900-kilogram bomb in the open means "instant death" for anyone within about 30 meters. Lethal fragmentation can extend for up to 365 meters.

In an Oct. 31 strike on the urban refugee camp of Jabaliya, experts say a 900-kilogram bomb killed over 100 civilians.

Experts have also identified fragments of SPICE (Smart, Precise Impact, Cost-Effective) 900-kilogram bombs, which are fitted with a GPS guidance system to make targeting more precise. Castner said the bombs are produced by the Israeli military company Rafael, but a recent State Department release first obtained by The New York Times showed some of the technology had $been \, produced \, in \, the \, United \, States.$

The Israeli military is also dropping unguided "dumb" bombs. Several experts pointed to two photos posted to social media by the Israeli Air Force at the start of the war showing fighter jets stocked with unguided bombs.





Is the strategy working?

Israel says it has two goals: destroy Hamas and rescue the 129 captives still held by fighters.

Eleven weeks into the war, Israel says it has destroyed many Hamas sites and hundreds of tunnel shafts and has killed 7,000 Hamas fighters out of an estimated 30.000-40.000. Israeli leaders say intense military pressure is the only way to free more captives. But some families of hostages worry that the bombing endangers their loved ones. Captives released during a weeklong cease-fire last month recounted that their captors moved them from place to place to avoid Israeli bombardment. Hamas says that several captives died from Israeli bombs.

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