

GBU-39

By Sejin An

Brian Fu

Jane Januar

Jacob Morentz


Sricharan Samudrala

Kyle Wong

THE OUTSKIRTS OF ST. LOUIS, MO...



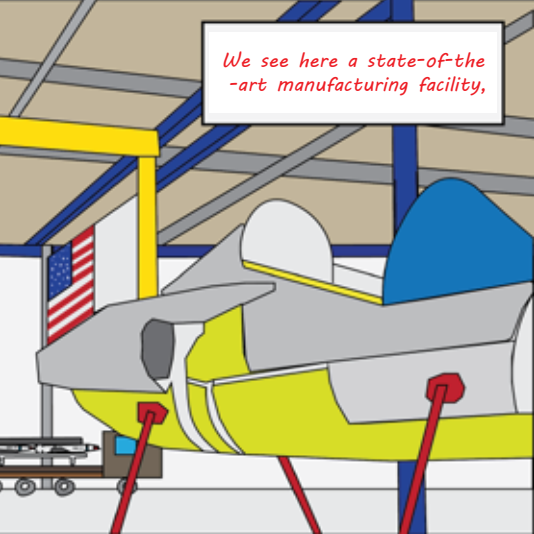
A GROUP FROM THE US CONGRESS
TOURS A BOEING FACILITY!

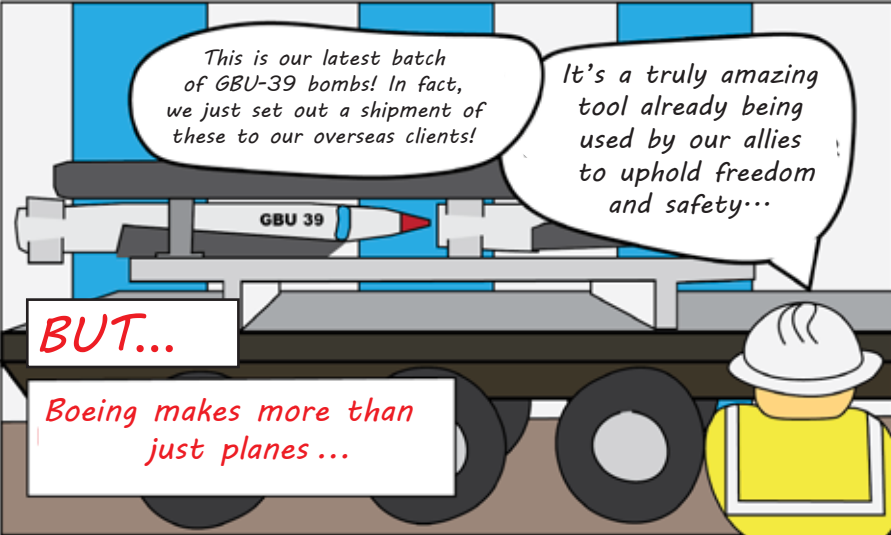


*Welcome everyone to
our manufacturing
facility!*

*I'm Nick, an engineer
here at Boeing, ready
to show you our latest
and greatest defense
technologies!*

We see here a state-of-the-art manufacturing facility,





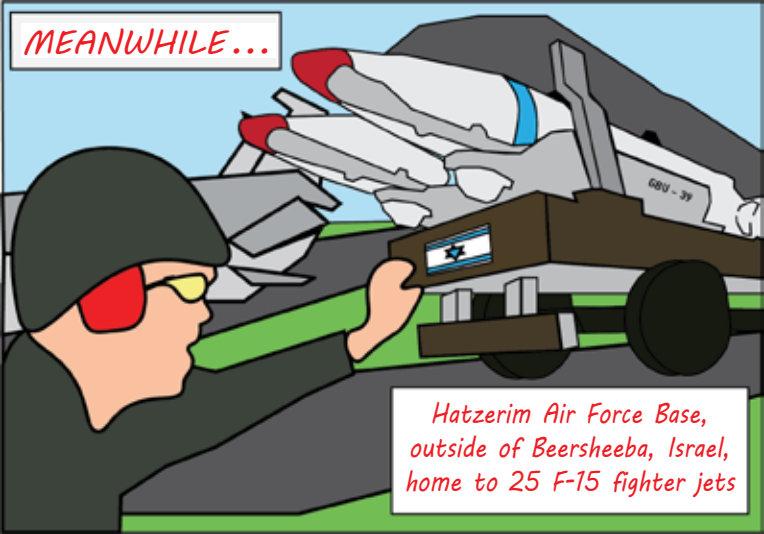
*This is our latest batch
of GBU-39 bombs! In fact,
we just set out a shipment of
these to our overseas clients!*

*It's a truly amazing
tool already being
used by our allies
to uphold freedom
and safety...*

BUT...

*Boeing makes more than
just planes ...*

MEANWHILE...




*Hatzerim Air Force Base,
outside of Beersheeba, Israel,
home to 25 F-15 fighter jets*



\$40,000

Multiple GBU-39's are loaded onto the bomb rack of an F-16 Fighter Jet, armed and ready!



*The GBU-39
is incredibly precise,
with an ability to
pierce through three
walls!*



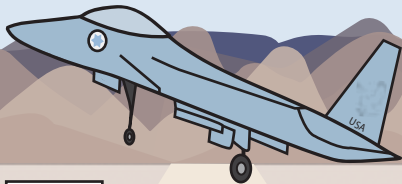
GBU-39B Weapon

Weight: 500 lb (122 kg)

Length: 20.8 ft (3.8 meters)

Width: 7.5 ft (19 cm)

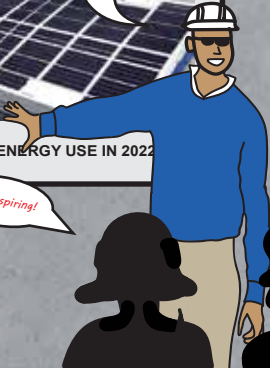
*Wow, so
powerful!*




*An F-15 takes off in
Israel, its target's
coordinates in hand... **



*It flies over the Gaza Strip,
one of the densest populated places on Earth*

A man wearing a blue sweater, a white hard hat, and sunglasses is pointing his right hand towards a large array of solar panels. He is standing in front of a presentation board. In the foreground, the silhouettes of three people are visible, looking towards the man and the board.

*Here at Boeing,
our manufacturing
process also place a great
emphasis on sustainability!*

An aerial view of a large, rectangular solar panel array installed on a flat, light-colored surface, possibly a rooftop or a dedicated solar farm. The panels are arranged in a grid pattern.

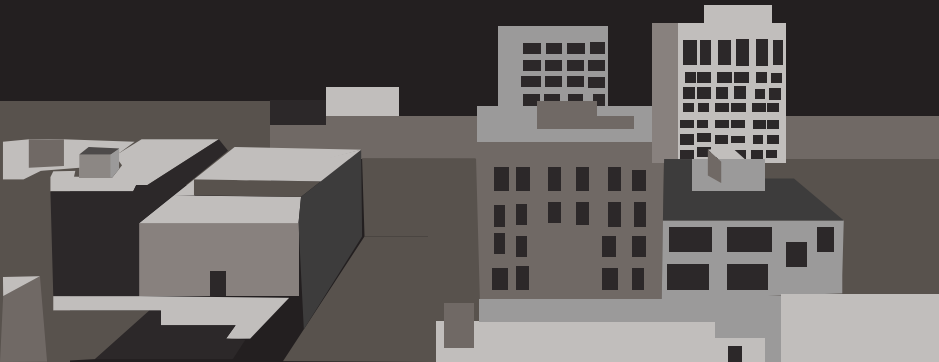
35% RENEWABLE ENERGY USE IN 2022


How inspiring!

*The GBU-39 uses
GPS to navigate
to its target-
The Nofal family's
home*



*Above Tel-Al Sultan Refugee
Camp, near Rafah, Gaza*

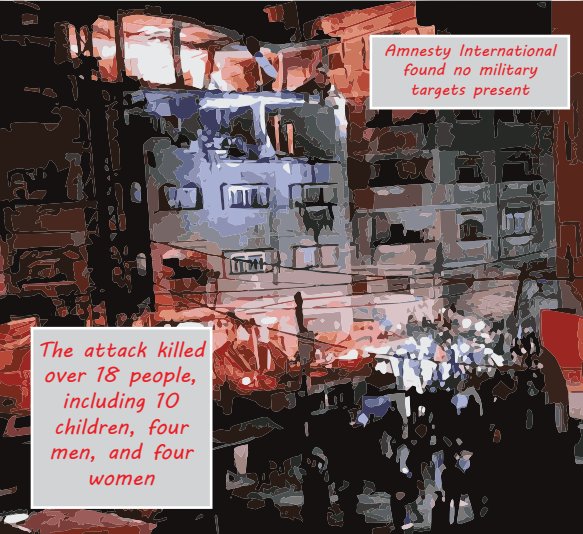




*A single bomb
contains 250 lbs
of explosives*

*Its warhead can
penetrate 6ft of
reinforced concrete*





*Amnesty International
found no military
targets present*

*The attack killed
over 18 people,
including 10
children, four
men, and four
women*



BOEING



Ethical bombs?! This is amazing! I've gotta buy Boeing stock ASAP!

I know right? This kind of ingenuity is why we're the best country in the world!



References

- Amnesty International. (2024, February 12). New evidence of unlawful Israeli attacks in Rafah causing mass civilian casualties. Amnesty International. <https://www.amnesty.org/en/latest/news/2024/02/israel-opt-new-evidence-of-unlawful-israeli-attacks-in-gaza-causing-mass-civilian-casualties-amid-real-risk-of-genocide/>
- Boeing Receives First Small Diameter Bomb Full-Rate Production Order from U.S. Air Force. (n.d.). MediaRoom. Retrieved April 4, 2024, from <https://boeing.mediaroom.com/2006-12-19-Boeing-Receives-First-Small-Diameter-Bomb-Full-Rate-Production-Order-from-U.S.-Air-Force>
- Bomb, Glide, Precision-Guided, Small Diameter Bomb, GBU-39, Model | National Air and Space Museum. (n.d.). Airand.space.si.edu. Retrieved April 4, 2024, from https://airand.space.si.edu/collection-objects/bomb-glide-precision-guided-small-diameter-bomb-gbu-39-model/nasm_A2020502000
- Diameter Bomb, S. (n.d.). LOW-COST, PRECISION-STRIKE WEAPON SYSTEM. https://www.boeing.com/content/dam/boeing/boeingdotcom/defense/weapons-weapons/images/small_diameter_bomb_product_card.pdf
- GBU-39 Small Diameter Bomb I Archives | Air & Space Forces Magazine. (2024). Air & Space Forces Magazine. <https://www.airand.spaceforces.com/weapons-platforms/gbu-39-sdbi/#:-:text=GBU%2D39%20SDBI&text=Boeing%20was%20selected%20to%20fullyGBU-39B%20Small%20Diameter%20Bomb%20Weapon%20System.>
- GBU-39B Small Diameter Bomb Weapon System. (n.d.). Air Force. <https://www.af.mil/About-Us/Fact-Sheets/Display/Article/104573/gbu-39b-small-diameter-bomb-weapon-system/>
- Harris, S. (2023, February 24). Inertial Navigation Systems (INS) - an Introduction. Advanced Navigation. <https://www.advancednavigation.com/tech-articles/inertial-navigation-systems-ins-an-introduction/>
- Hodge, N. (n.d.). Israeli Jets Drop "Small Smart Bomb" in Gaza Strikes. Wired. Retrieved April 4, 2024, from <https://www.wired.com/2008/12/israeli-jets-dr/>
- Israel/OPT: fresh evidence of probable war crimes in Israeli attacks on Rafah. (n.d.). Wwww.amnesty.org.uk. Retrieved April 4, 2024, from <https://www.amnesty.org.uk/press-releases/israelopt-fresh-evidence-probable-war-crimes-israeli-attacks-rafah#:-:text=On%209%20January%2C%20just%20beforeIsrael's%20deadly%20attack%20on%20the%20Jabalia%20refugee%20camp%20What%20we%20know%20so%20far.>
- Israel's deadly attack on the Jabalia refugee camp: What we know so far. (2023, November 1). Al Jazeera. <https://www.aljazeera.com/news/2023/11/1/israels-deadly-attack-on-the-jabalia-refugee-camp-what-we-know-so-far>
- LBCI exclusive: Israel used GBU 39-B Small Diameter Bomb precision-guided glide bomb in Saleh al-Arouis assassination. (n.d.). LBCI.V7. Retrieved April 4, 2024, from <https://www.lbcigroup.tv/news/news-bulletin-reports/745035/lbci-exclusive-israel-used-gbu-39-b-small-diameter-bomb-precision-guid/en>
- Losey, S. (2021, December 17). The T-7 takes shape: Inside the factory where the Air Force's next trainer is being built. Defense News. <https://www.defensenews.com/air/2021/12/17/the-t-7-takes-shape-inside-the-factory-where-the-air-forces-next-trainer-is-being-built/>
- Military experts discuss Israel's use of unguided bombs and harm to civilians in Gaza. (2023, December 15). PBS NewsHour. <https://www.pbs.org/newshour/show/military-experts-discuss-israels-use-of-unguided-bombs-and-harm-to-civilians-in-gaza>
- St. Louis, Missouri Population 2020 (Demographics, Maps, Graphs). (n.d.). Worldpopulationreview.com. <https://worldpopulationreview.com/us-cities/st-louis-mo-population>
- U.S. Census Bureau QuickFacts: St. Louis city, Missouri. (n.d.). Wwww.census.gov. <https://www.census.gov/quickfacts/fact/table/stlouismissouri/PST045223>
- US approves the sale of GBU 39 Small Diameter Bomb to Saudi Arabia. (n.d.). Wwww.globaldefencemart.com. Retrieved April 4, 2024, from <https://www.globaldefencemart.com/news/US-approves-the-sale-of-GBU-39-Small-Diameter-Bomb-to-Saudi-Arabia>
- US sends "bunker buster" bombs to Israel for war on Gaza, report says. (n.d.). Al Jazeera. <https://www.aljazeera.com/news/2023/12/2/us-gives-bunker-buster-bombs-to-israel-for-war-on-gaza-report>