Is that coffee or a cow?

FEA Not To Miss Blog, News & Coffee Break Time
Engineering Simulations, Tutorials, Events, Gossip
Issue January 2020 www.feantm.com

John O. Hallquist

Software seller finds zero is hard price to beat
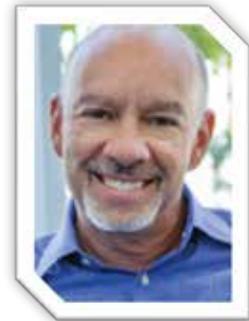
LS-DYNA Multiphysics group Wingnut simulation
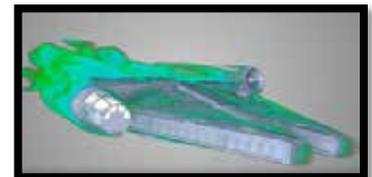

James R. Scapa, Altair 2019 Year in Review

LST, LLC jointly developed tire models with FCA

LEGO Crash
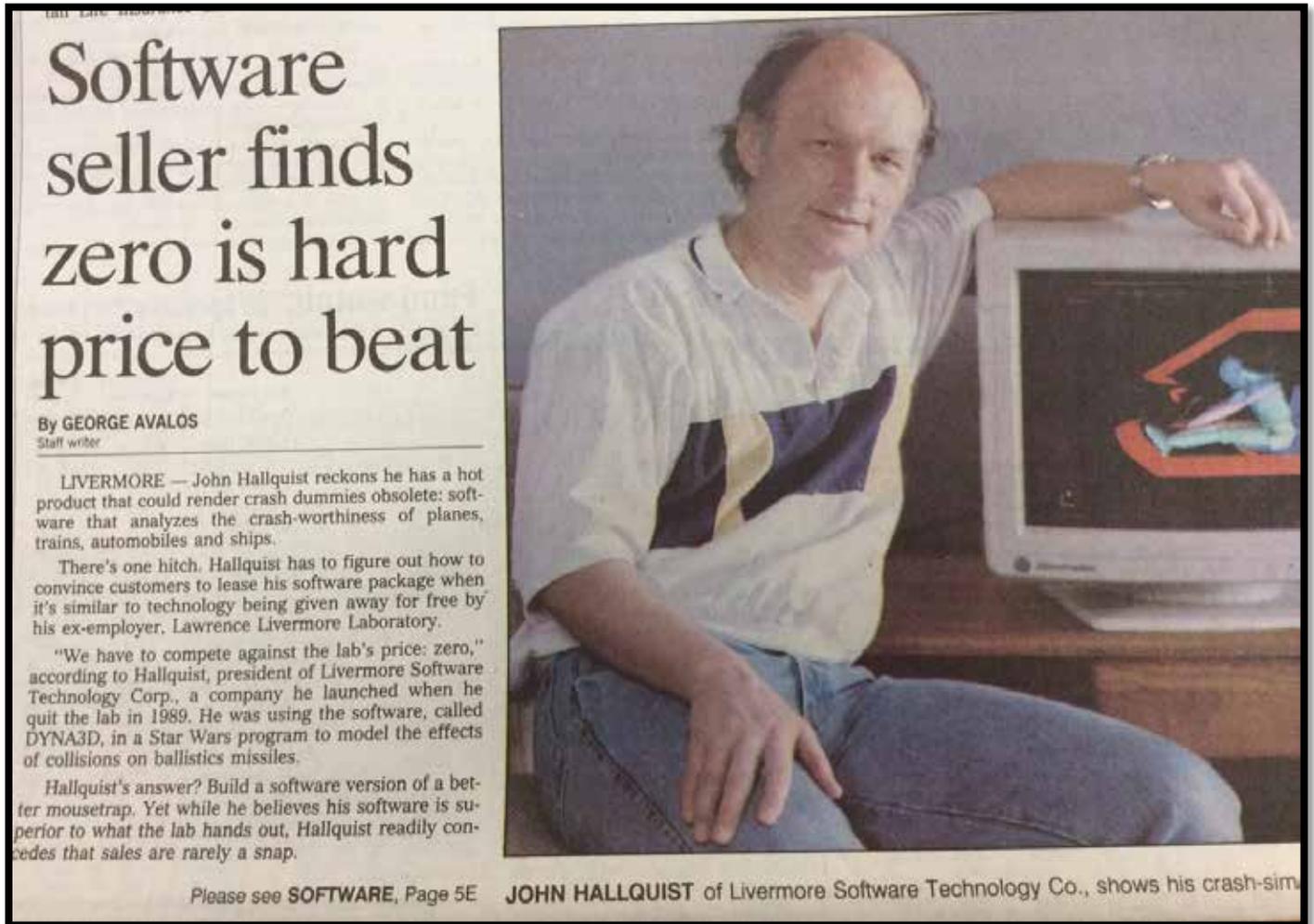

Curt Chan Star Wars simulation

FEANTM Table of Contents

FEANTM Walk Down Memory Lane

While we were cleaning LSTC office files, we came across old newspaper articles. The article below has to be shared. This article was in The Business Times dated March 26, 1993

Software seller finds zero is hard price to beat

By GEORGE AVALOS
Staff writer

LIVERMORE — John Hallquist reckons he has a hot product that could render crash dummies obsolete: software that analyzes the crash-worthiness of planes, trains, automobiles and ships.

There's one hitch. Hallquist has to figure out how to convince customers to lease his software package when it's similar to technology being given away for free by his ex-employer, Lawrence Livermore Laboratory.

"We have to compete against the lab's price: zero," according to Hallquist, president of Livermore Software Technology Corp., a company he launched when he quit the lab in 1989. He was using the software, called DYNA3D, in a Star Wars program to model the effects of collisions on ballistics missiles.

Hallquist's answer? Build a software version of a better mousetrap. Yet while he believes his software is superior to what the lab hands out, Hallquist readily concedes that sales are rarely a snap.

Please see **SOFTWARE**, Page 5E

JOHN HALLQUIST of Livermore Software Technology Co., shows his crash-sim

The article above can be found here: PDF of John O. Hallquist

Art Shapiro
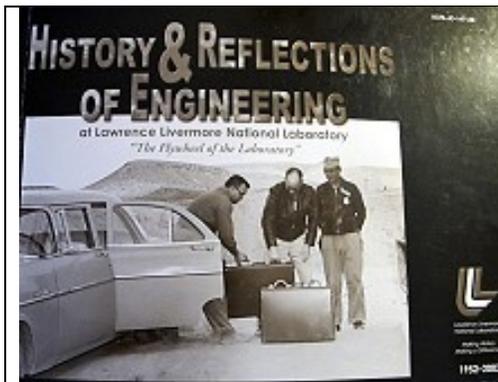
Art Shapiro, on LLNL's 50th Anniversary. A really great article from the developer of the software code TOPAZ.

Article pdf

	Who's watching the new Star Wars movie? (note: larger mp4 file about 21MB but well worth it) Any bets on if the Millennium Falcon's Radar Dish will get knocked off? Yuki Okada and I are back at it, and thought..how would the air velocity look if the radar dish wasn't there?
	From my LinkedIn postings ".. how fast could we (Yuki Okada & Ethan Thompson) simulate a Witch's Cauldron in ANSYS Discovery? ... How would a 'gust of wind' affect the airflow?"
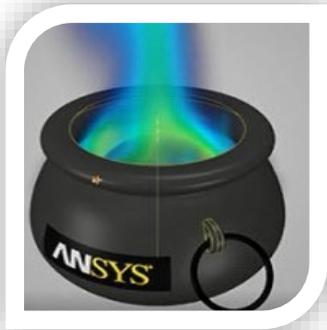
FEANTM News

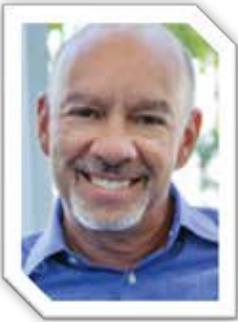|	
	The DYNAmore company brochure
	LST, LLC jointly developed tire models with FCA. **The models are based on a series of material, verification, & component level tests.**
	LS-DYNA: Common Contact Examples & Cases

FEANTM Guests - December

	James R. Scapa, CEO Altair **Altair 2019 Year in Review**
	Gagan Saket from BMW Group **Next Level Engineering: Digitalization of know-how in vehicle development**
	12/09 ANSYS - Marine Tixier - Design Exterior Aircraft Lights - helps pilots navigate, avoid collisions, land, taxi and signal other aircraft.
MSC.Software 2019 Feature Pack 1: What's New	**12/02 MSC.Software - Webinar- Introducing Marc 2019 - M. Kokaly & B. Gahdia**

FEANTM Software Choice for January

Press Forming Simulation

JSTAMP

- For Press Die Surface Design
- Blank Line, Trim Line Propagation Prediction
- Crack/Wrinkle, Sprring Back Prediction
- Spring Back Compensation and CAD export
- Material Database
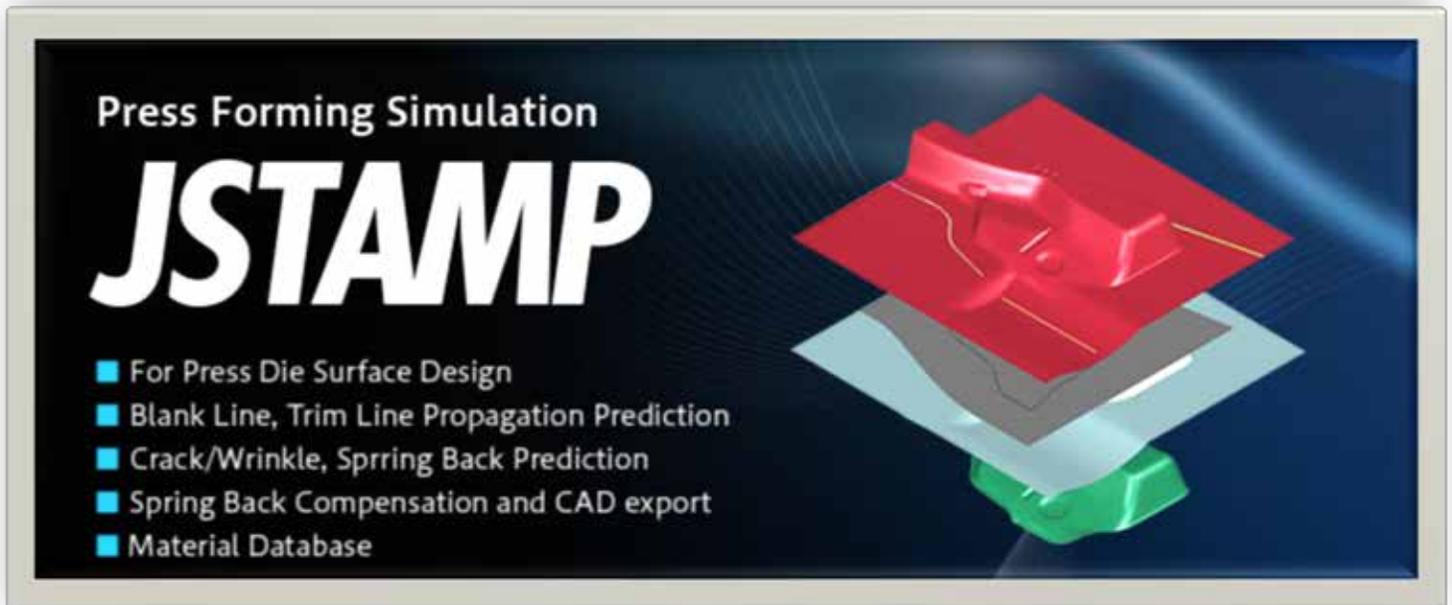
JSTAMP represents the Sheet metal forming process virtually by numerical simulation. Users can examine the simulation result, output it to CAD, and directly use the CAD as a countermeasure by using JSTAMP.

Designers can avoid the challenges of trial and error. JSTAMP provides an adequate result and reduces the lead time and cost of tool design.

JSTAMP provides comprehensive support throughout the design process from the first trial to the final stage. The feature for addressing complicated process stages, low formability materials, and latest technologies covers various tasks in the Sheet metal forming process.

For Complete Information visit their website: JSTAMP

FEA Not To Miss
Simulations & Favorites

Apples are their favorite. I explained to them that's not relevant to engineering.

Coffee Le LEGO Week. I love these LEGO simulations, slinky, toys, planes. WAIT - it seems I love all of them with coffee.

(42083) crash at 46kmh against 40% offset barrier
LEGO BUGATTI Chiron
Simulation with LS-DYNA for 130ms real time.

And with this week's coffee I'm grabbing my tool kit and giving a free wingnut with each to go cup! Why you ask?   Because it is Cafe Wingnut simulation week! Wingnut simulation in LS-DYNA displaying the Dzhanibekov effect

The Dzhanibekov effect was tested with a simulation using LS-DYNA.

I am proud to let you know my To Go Cups didn't spill in the below video/simulation. NOW, off we go to watch the simulation by GDTech Belgium - LS-DYNA simulation compared to experiment   38T truck impacting a bridge barrier (containment level H4b) with a speed of 65 km/h at an angle of 20°
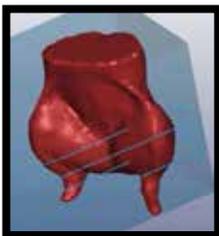

Time to grab your coffee, sit back and watch a tutoria. LS-DYNA Structured ALE using LS-Prepost Solution Explorer: bullet penetration A tutorial to setup LS-DYNA Structured ALE model using a newly developed Solution Explorer module. A bullet penetrating pig leg at a speed of 900m/s.   Wenhui YU, LS-DYNA, Dalian Office

FEA Not To Miss Simulations & Favorites

Okay, NO place would be safe for my to go coffee cups for below simulation. BUT we sooooo love Lego Crash cars by DYNAmore/SCALE. What flavor you ask? Crash Chocolate with a dash of bumper vanilla. Ouch!

Lego Crash 2019
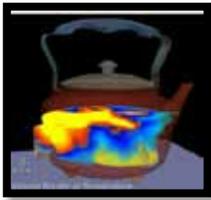
Yes, I wish it was a coffee kettle. As we all know I'm not a tea drinker, BUT maybe I can heat coffee up in it and pretend I'm a tea drinker? Then we can rename it Coffee Kettle Simulation!

Electric Kettle simulation using LS-DYNA

Okay, I can hear the buzz in the room on today's simulation that it was in the email blog. BUT, it's a cauldron and I didn't have it on this site! AND I want one for the coffee shop to stir a new flavor! So, today we're having my great new Cauldron Cocoa Coffee with Cauldron Chocolate Chips. (notice all the C's) Witch's Cauldron in ANSYS Discovery?
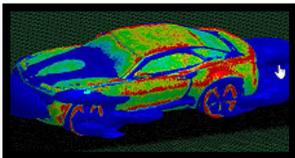
CAR time! Who was that person that owned a 1969 Camaro? Who parked the car facing away from the movie at the Drive In Theaters? My brother owned a 442 and I had a baby blue Impala, SO who owned that Camaro? And with a Camaro to go cup - ZOOOOM Camaro time! *LS-DYNA CFD simulation of the GMC Camaro model*
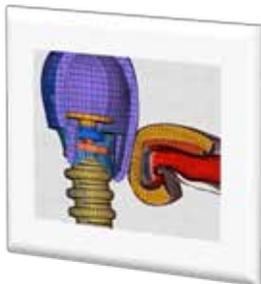
At times I may want to punch something but I would NEVER do it holding my coffee cup! SO, I shall call this weeks coffee flavor Cafe-Mocha-You-Better-Duck

Boxing glove foam simulation, side punch -LS-DYNA

FEA Not To Miss Simulations & Favorites

Not only did they crash their heads, drop the football, and probably have a heck of a headache BUT they dropped the coffee! How rude to ruin my Football To Go Cups! [a proof-of-concept collision between two football players.](#)

And it's plane week!   First - Where NOT to stand talking to your friend! Airport Runway? Ya think? This was to good not to share! Luckily they left their coffee at my shop.   **[Crash Test Dummy](#)**
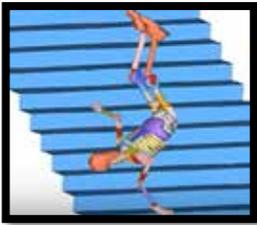
This is a who murdered the dummy - at the start of the simulation he is hit with a pole! Who did that? SO at the top of stairs always look behind you!

[Hybrid 3 Crash Test Dummy Falling downstairs](#)

FEA Not To Miss Events

if you have a conference to share please send me start date, title, url.
Marsha: feaanswer@aol.com

Starts	Year 2020 Get Ready
03/20	UK Oasys LS-DYNA Users' Meeting
04/24	Lightweight Design Summit
05/26	NAFEMS Nordic Regional Conference
05/31	16th Int'l LS-DYNA Conference & Users Meeting
06/09	NAFEMS UK Conference 2020
06/16	CAASE20: Conference on Advancing Analysis & Simulation in Engineering
06/23	MSC Software Conference 2020
10/07	16th German LS-DYNA Forum in Ulm, Germany

FEANTM Coffee & Gossip Section
by Marsha, your monthly Gossip Blogger

Well, here we are in 2020, grab your cup of coffee, and here are my pictures for January!

The below picture was taken after a heavy rain while I was driving home. Yes, I actually pulled over to the side of the rural road and took the picture.

WAIT! I bet you're all wondering what New Year Resolution I made? Well, it's the same resolution as the last five years! To lose the same weight I've said that I've mentioned over the previous five years! SO, my suggestion is don't wait until 65 to make that resolution, since at 70 you'll still be the same weight! Probably you won't be the same weight if you stop eating candy and ice cream and drinking a lot of coffee while eating muffins. SO the positive 2020 thought is that it's a good thing Gossip has no calories!

I liked the sky and the cloud formation. The front area in the picture is a vineyard.

FEANTM Coffee & Gossip Section
by Marsha, your monthly Gossip Blogger

I call this picture BIRD TREE - They wait for me in the mornings to put out the bird seed, when I feed the horses. Then at 5:00 they're there, again, for when I give the horses their night hay. They have me very well trained since when I see the tree get to full of birds I go out and give them bird seed.

OH NO! I'm now a senior citizen, like those who sit in the park, on the park benches, who feed the pidgeons crumbs of stale bread! 😊