Text and photos courtesy of Gareth Lock

On 24-25 September 2021, the first-ever Human Factors in Diving Conference ran. There were 27 speakers from across the globe (New Zealand, Australia, Dubai, Europe, United States and Mexico) supported by the platform hosts LexGo Live. Just less than 25 hours of content was produced during the two eight-hour days and was uploaded in near-realtime, which will contribute to the learning about and application of human factors, non-technical skills, Just Culture and psychological safety in the sports, military, commercial and public safety diving sectors.

So, how did it start and what can you learn from the development of this event if you want to put something similar together?

#### The Idea

The genesis of the idea really started in July 2019 when I was running a two-day Human Factors in Diving face-to-face class in Edinburgh. There was a conversation between a few of the students who were from DAN Europe and the healthcare sector. Ideas were bounced around, but nothing really happened, partly because of the Covid-19 pandemic in 2020 and 2021, there were no dive shows!





62 X-RAY MAG: 108: 2021

# feature

Screenshot from the virtual event Human Factors in Diving Conference presented by Gareth Lock (right)

However, in January 2021, colleagues of mine working in the veterinary medicine domain (VetLed) organised the first Veterinary Human Factors Conference (virtually) and I attended. At that time, I was in quarantine in New Zealand, and this reignited my thoughts for a diving conference. Unfortunately, I was then busy for the next two months and missed the window for "pre-season" in the United Kingdom.

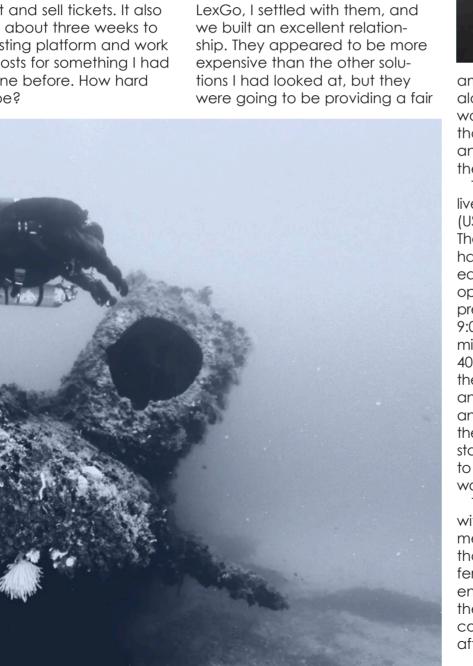
I am not sure what happened at the start of June, but I decided that I was going to make this happen in 2021. I reckoned it would take about three months to aet people interested and get a date in people's diaries. I was also conscious that it was still diving season in the United Kingdom so chose a Friday and a Saturday.

Then, I arranged a meeting with my marketing advisor, Ros Conkie (Ros Conkie Marketing), and Mickey Wilson (Firestarter Marketing) to work out a strategy. We developed a delegate journey, aiming for a public announcement on 28 June. This would give three clear months to market and sell tickets. It also aave me about three weeks to find a hosting platform and work out the costs for something I had never done before. How hard could it be?

#### T-3 months

I wanted a virtual platform that recreated the social interaction of a physical conference, and I was reminded of a platform that had been recommended some three months prior, called LexGo Live. Fundamentally, I did not want a Zoom-like experience, which had only one-way communication, and all the solutions I had seen, apart from LexGo, were similar.

After some discussions with LexGo, I settled with them, and we built an excellent relationship. They appeared to be more expensive than the other solutions I had looked at, but they





amount of conference support along with event producers who would be backstage making sure that all appeared fine out front, and in hindsight, it was worth it for the delegate experience.

The website was launched with live (US\$80), live plus recordings (US\$150) and VIP tickets (US\$250). The conference had two "main halls" with seven speaking slots in each, plus a large stage for the opening and closing addresses—30 presentations in total, running from 9:00-17:00 UTC. Each slot was 50 minutes long, starting with 35 to 40 minutes for the presentation, then 10 to 15 minutes for questions and answers with the audience, and ending with 10 minutes for the changeover. Each talk would start on the hour, making it easier to deal with multiple time zones. It was going to be intense!

The plan was for 300 tickets, with 50 of those for the speakers, media and training agencies so that they could see what the conference was. This would provide enough to cover the costs and then allow research and more course development to happen afterwards. Smaller would be bet-

ter for the interactions that LexGo would support.

With my own (over) self-confidence, I had hoped that a large percentage of the tickets would be sold in the first few days, as I had built up some significant interest on social media and had 350+ people pre-register. Only 50 sold on launch day and over the next couple of days... I was disappointed.

Costs at this stage were expected to be in the order of GB£ 25k covering the LexGo hosting platform and support, marketing (pre-, during and post-event), video production and editina.

#### T-1 month

Between 28 June and the start of September, I worked with LexGo to refine what the conference would look like. Bringing in professional event producers was an excellent idea as this allowed their expertise to be utilised in terms of the speaker and delegate interactions.

Ticket sales still were not areat, but then sales tend to pick up closer to the event date. However, I started getting responses saying that potential

attendees were now busy that weekend...

#### T-2 weeks

Things were now starting to hot up! As one of my maxims is to plan to fail safely, I had asked all the speakers to get their presentations and video recordings of those presentations to me two weeks prior to the event. This would allow me to see what they were presenting, as my opening and closing addresses would be influenced by their content. It would also allow me to see if the content hit the mark as some of the speakers had never presented to an audience like this, or to the diving community. Most of the materials did not arrive at T-2 weeks...

Emails sent to training agencies were followed up, again. Eleven organisations were invited, five responded, and four provided names and email addresses for their free tickets. Somewhat disappointed with the uptake, as this topic has been recognised by everyone who has done a course with The Human Diver (diver training organisation) as being critical to improving diving safety.

X-RAY MAG: 108: 2021









Recording-only tickets were made available at U\$\$120. In hindsight, this probably should have been done either much earlier or not until after the event.

#### T-1 week

My internal pressure was rising. A combination of short timescales and a realisation that there was still lots to do, and that the conference might not add the value I had hoped it would, added to the stress.

The week was mainly spent sorting out presentations and recordings, marketing the conference, having podcast interviews (I did five in the end!), along with writing a new presentation as one of the speakers now said they could not take part!

Monday evening, four days before kick-off: We ran through an excellent dress rehearsal with LexGo, the production team, and me walking/talking through the delegate and speaker journeys.

This proved invaluable, identifying gaps in knowledge, validating assumptions that we had made, and ensuring that the media would run.

This highlighted that there was not a way of broadcasting to everyone who the next speakers were, like a Tannoy publicaddress system or bell, so I created 30 reminder emails within Kajabi, which would go out at T-3 minuntes to the next speaker giving their details and the one after that. This worked like a treat!

We also reduced the number of tables in the conference halls, as we were only at a total 146 live attendees.

#### T-48 hours

Emails were sent out to speakers and delegates with a PDF related to the speaker/delegate that gave them all the information they needed for the conference experience, including screenshots. A video was also produced

by LexGo, and this was sent out at T-24 hours and T-1 hour.

#### T-3 hours

The final speaker video presentation was uploaded into the system! This, and two others, were needed on the first day of the conference due to several extenuating circumstances, so it was definitely worth having the pre-recordings.

#### T-1 hour

Teams assembled and everything was tested to make sure it worked. Room captains were briefed; they had already been emailed about their roles and responsibilities, along with the biographies and synopses of the speakers as well as two to three questions from each speaker in case there were no questions from the floor.

### Zero Hour, and onwards!

The conference went really well. There were some minor techniEVENT SCREENSHOTS: There were 27 speakers from around the world at the Human Factors in Diving Conference, including: Dr Hellene Pellerin, Dr Laura Walton, Dr Simon Mitchell and Dr Mike Rothschild (left, clockwise); Andrzej Gornicki, Cdr Geir Gunderson, David L. Conlin, and Darryl Owen (below, clockwise).

cal alitches with the LexGo Live,

mainly due to some of the hosted

videos, but overall, everyone was

up until the morning of the sec-

ond day was the impact a work firewall would have on video

and audio. With the exception of

two speakers, they were all given

training on how to use LexGo prior

to the event. The room captains

had their training in the morning

as there was not much for them

to do. It was at this point we real-

ised that I would have to stand in

as a room captain for Hall 2! On

Friday, I had been roving around

and acting as a "catch-all," and

so that spare capacity was miss-

ing. Fortunately, Alex from LexGo

pleased (speakers and delegates).

One thing that was not picked

stepped into that role.

Each day, there was a short debrief with the LexGo team to see what gaps needed covering for the following day, or immediately after the conference, for other clients.

The video recordings were uploaded by the video production team within one hour of each day's end, which meant people could watch the sessions they missed straightaway! Emails were sent out to everyone letting them know about this feature, once the videos were in place.

### Delegate feedback

Overall, the feedback was really positive. LexGo Live provided an opportunity to meet people at

their tables while watching the presentations. They could also move over to a table in the foyer and talk with the speakers, the same as you can do in a live conference. This generated some rich conversations, and it also provided the opportunity for others to listen in on the conversations that were taking place and gain knowledge that way.

**Event** 

#### What worked well and why

 Regular communication with delegates and speakers via the Kajabi email system and personal emails kept the interest up, and while some speakers complained of too much information, others said it was perfect.









1

X-RAY MAG: 108: 2021 EDITORIAL FEATURES TRAVEL NEWS WRECKS EQUIPMENT BOOKS SCIENCE & ECOLOGY TECH EDUCATION PROFILES PHOTO & VIDEO P

## feature

EVENT SCREENSHOTS: Speakers at the Human Factors in Diving Conference also included Sally Tindall, Dr Frauke Tillmans, Jenny Lord, and Beatrice Rivoira (right, clockwise); Dr Tristan Cope, Pierre LeFevre and Robin Kirkpatrick, Tim Andro, and Tim Clements (below, clockwise).

- Having a professional production and support team. I soon realised that I was not going to be able to do this role and would need support. The same goes for the video recording production team. Pay an expert and they will do it much more quickly and effectively than you can!
- Working with LexGo because they recognised that the end customer, the delegate, is the person you have to please, and are adaptive and proactive in making that experience work well. They still kept their direct client (me) happy by listening to what I wanted from the event. They had a much more personable style than the other vendors I approached.
- Use of the Kajabi platform for hosting and viewing the recorded presentations and providing a platform for additional speaker materials.
- Giving explicit guidance, and potentially coaching, to speakers about the length of their presentation. Pre-recording forces that reflection to happen.
- **Pre-recording** meant that when a speaker was not available. the live delegates still got useful content.

What needs to be improved and how Articulating the value of human factors. The value of human factors, non-technical skills and a Just Culture need to be articulated in a manner so that divers.

training agency staff, military and commercial diving supervisors want to attend a conference like this. This is something I still struggle with.

Once seen, the effect of applying human factors principles and practices cannot be unseen. The challenge is opening the eyes to start with. One piece of feedback highlighted that many people are willing to be social media supporters of human factors and incident discussion with "likes," but few are willing to spend money to invest in their own personal development.

This meant that an expected profit of GB£ 10k to support research about human factors in diving turned into a GB£ 5k loss. Only 62 post-conference recordinas have been sold to date.









**Zoom fatique.** Eighteen months of Zoom and Teams calls due to Covid-19 pandemic restrictions meant that many divers did not want to spend more time in front of a monitor for a whole day.

Working with a start-up is great because there is an opportunity to shape how things look. However, it also means that some of the automations and features are not there vet.

**Deadlines** mean different things to different people! Explaining the reason for a deadline helps cement why the time/date is as it is. Ask delegates if they have anything in the weeks prior to the conference that could impact their delivery of materials and work around that.

invest around 100 to 120 hours of preparation plus live time, and the follow-up effort, which I reckon will be another 40 to 60 hours. None of this personal time has been recovered; it was the direct costs that were approximately GB£ 25k.

Do I think it was worth it? Yes. The conference proceedings will be published before 31 Dec 2021 by Divers Alert Network Europe, and I am hoping that they will get wider circulation than the videos. One opportunity would be to add a day onto an existing physical conference, but then this would likely produce costs areater than a virtual conference, and the latter would have a global reach in real time.

Change in this area is going to be very slow because the results are not easily identifiable when the metric of safety is the number of divers who are injured or killed. Furthermore, including human factors content into training materials has cost and time impli-

cations, especially when it comes to ensuring that the instructors know what it means and can teach it. The Human Diver will continue doing what it does, playing the Infinite Game in which there are no individual winners.

The Human Diver was created by founder and experienced diver Gareth Lock who has committed his life to diving, diver training and the training of high-performance teams after his 25-year career in the Royal Air Force. To date, he has completed more than 800 dives around the alobe on OC and CCR and to depths in excess of 70m. Gareth knows from his role as Squadron Leader in the Royal Air Force that the most effective teams never lose sight of each other's interactions and performance. It is something deep in the psyche of the RAF and aviation in general. For more information, visit: thehumandiver.com.





User interface interaction - tiered alarms and emerging scenarios

Breathability



Conclusion Would I do this again? Definitely! Is it possible to run a virtual alobal conference with one person organising it? Yes, but expect to

65 X-RAY MAG: 108: 2021 FEATURES