

Helping Humanitarian Hardware Designs Discovery

Points of Departure:

- Field Ready's catalogue is open-source and was publicly shared using an AirTable database for easy maintenance and updating by Field Ready's teams, in work funded by Andrew Lamb. It is no longer accessible due to a change in AirTable's policies which prevent external links etc.
- Part of Field Ready's catalogue was certified as open-source hardware by OSHWA using funds from Andrew Lamb. The OSHWA certification database linked to the AirTable database, so all of the links in OSHWA's system are now broken.
- There remains no 'humanitarian' category on the OSHWA Certification website.
- Much of Field Ready's catalogue of open-source hardware designs remains unavailable to the public and is stored on Field Ready's internal file sharing system or engineers' laptops.
- None of Field Ready's catalogue are accessible on Field Ready's own website.
- Many of Field Ready's catalogue were issued with basic Open Know-How Discovery manifests in work funded by Andrew Lamb. These could not then be placed on Field Ready's web servers. They may be visible online elsewhere but nevertheless the links in these manifests will now be out of date.
- The Humanitarian Making website, funded by Andrew Lamb, included a paid WikiFactory-hosted white-label tool for aid agencies to upload their designs, since many did not have their own sharing websites. Some of these designs were also hosted on the main WikiFactory website. Changes at WikiFactory have broken these systems or have otherwise reduced access.
- Several humanitarian aid agencies have design files that they share on online platforms (e.g.: MSF uses Printables and Oxfam uses MyMiniFactory). However, they may not be properly licensed, are limited to 3D Printing design files only, have no Open Know-How manifests and suffer from regular platform changes and closures. Only Field Ready, funded by Andrew Lamb, prioritised this work.
- Several humanitarian aid agencies have design files that they want to share, but they are not aware of the concept of Open Hardware nor of the existence of online sharing platforms (e.g.: RNLI).
- The Open Know-How search ecosystem has developed significantly in recent years.
- Appropedia and Helpful Engineering have developed tools to help co-ordinate production of online design files using Open Know-How and mapped machines and tools using Open Know-Where.
- The ManyFold app has been developed to support easier self-hosting of hardware design files.
- Baserow has been developing as a successful open-source alternative to AirTable.
- There are now helpful rating systems and guidance for the open-ness of Open Hardware designs.

Points of Destination:

- All existing open-source humanitarian hardware designs and documentation are easy to discover, share, download and take to local manufacturing no matter which aid agency created them.
- They should have a safe and permanent home to guard against loss from policy/platform changes.
- They should be accessed through aid agencies' own websites if desired.
- They should be properly licensed, ideally using a fully open open-source hardware license or combination of licenses covering the design files, documentation and any software etc.
- They should all have Open Know-How Discoverability Standard manifests.
- They should be OSHWA Certified, particularly if they were created by US-based aid agencies.
- They should be available through Humanitarian Making as a disaster relief sector-specific website.
- They should be shared in a way that motivates and inspires open licensing, public sharing and good documentation practices by all aid agencies that use public money.

Stage 1 (3 days):

- Estimate the numbers of existing designs to begin progress tracking, including: the Field Ready catalogue on AirTable, WikiFactory, internal servers and elsewhere; that are OSHWA certified; that have Open Know-How manifests; that have been published by aid agencies on other platforms; etc.
- Assess possibility, effectiveness and costs of publishing 3D models on Appropedia.
- Assess the status of the ManyFold app and Baserow etc, and the possibility of using these tools with Appropedia and Humanitarian Making and aid agency websites.
- Determine any programmatic support to current humanitarian responses or crises.
- Explore other relevant efforts that should be considered i.e.: GOSQAS GDT, Open Know-Where, etc.
- Explore examples of nice, useful and effective websites i.e.: Makers Making Change, GitLab, etc.
- Refinement of scope.
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Stage 2 (duration to be estimated):

- Weekly check-in calls.
- Andrew Lamb to announce this effort and its progress at the FabLab Humanitarian Working Group, which convenes again on 28th July 2026 at Fab26 in Boston (trip to be funded by Public Invention).
- Transition of open, published design files from Field Ready to Appropedia & Humanitarian Making.
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Stage 3 (to be confirmed before proceeding):

- Transition of open, published design files from other aid agencies to Appropedia & Humanitarian Making, including completion of relevant meta-data fields such as readiness levels.
- Engagement with other aid agencies on their wider catalogues, including promoting the adoption of appropriate open licenses, improving documentation and encouraging public sharing, etc.
- Explore further support for this work e.g.: Appropedia to bid to NSF POSE to invest in Humanitarian Making as the ecosystem's website etc, with support from aid agencies.
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Indicators of success:

- All designs identified at the start of the project are also published / stored on Appropedia.
- All designs are accessible through the Humanitarian Making website, shown with readiness levels.
- All broken OSHWA Certification links are fixed.
- All designs have appropriate open-source licenses.
- All designs have near-full Open Know-How manifest files using the latest version of the standard.
- All designs are submitted to OSHWA Certification where the creator allows.
- The Field Ready database on AirTable can be safely deleted without any loss of data.
- The Humanitarian Making database on WikiFactory can be safely deleted without any loss of data.
- A Humanitarian category exists on the OSHWA Certification website.
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