Human Readiness Playbook

How to use this sheet: Work through the levels in order. Check a box only when you can answer "yes" with real evidence. Your current HRL is the highest level whose box is checked, with every box above it also checked.

✓ HRL	What's required	Key question to ask	Key risk if missed	What to do next
☐ 1	**Basic principles observed** Users, capabilities, limitations, and risks identified.	Have you identified who will use this system and their basic capabilities and limitations?	Design targets the wrong users or use case entirely.	List every user role with its capabilities and limits, then draft 2–3 usage scenarios with representative users.
☐ 2	**Human-centered concepts defined** Design guidelines and performance metrics defined.	Have you documented design guidelines and defined performance metrics (accuracy, workload, usability)?	No shared definition of "usable" — teams optimize different things.	Adopt a short set of design principles and set measurable targets for accuracy, workload, and usability.
☐ 3	**Requirements established** Task/safety analyses and requirements documented.	Have task and safety analyses been done, the user population characterized, and human-centered requirements written into the formal system requirements?	No testable requirements — nothing to hold the design accountable to.	Run task and safety analyses, then write human-centered requirements into the formal spec, each with a verification method.
☐ 4	**Modeling & part-task testing** Prototypes built and part-task tested.	Have prototypes been tested, with results compared against your HRL 3 requirements?	Flaws surface later, after they're expensive to redesign.	Build mockups, run part-task tests with users, and compare results against your HRL 3 requirements.
☐ 5	**Prototype tested by independent users** Prototype tested in mission-relevant simulation by independent users.	Was a working prototype tested in mission-relevant simulation by users outside your design team, with results reviewed by human-factors experts?	Design team's own bias goes unchecked — "looks fine to us."	Test a working prototype in mission-relevant simulation with outside users; have a human-factors expert sign off.
☐ 6	**Design matured, high-fidelity testing** Tested with fully representative users, full range of scenarios; issue tracking in place.	Was testing done with your real user population across all scenarios, including emergencies, and is a post-fielding issue tracker in place?	Last cheap opportunity to fix issues before production is missed.	Move testing to a high-fidelity or real environment with actual users, add emergency scenarios, and stand up an issue tracker.
☐ 7	**Verified in operational environment** Final system verified in the real operating environment.	Has the final system been verified in the actual environment, not just simulation?	Frozen design ships with unverified real-world performance.	Test the final hardware and software on site with representative users and verify each performance metric.
☐ 8	**Approved in mission operations** Production system tested/approved in real operations.	Has the production system been tested/approved in real operations, with issues resolved?	Production-scale investment committed before issues are resolved.	Run full mission operations; close each open issue or document explicit risk acceptance.
☐ 9	**Fielded, systematically monitored** Fielded with ongoing human-performance monitoring.	Is there an active process to monitor and act on human-performance issues post-fielding?	Emerging issues go undetected until they cause real harm.	Review human-performance data and incidents on a set cadence and check the human impact of every upgrade.

Your result Highest level checked, with every level below it also checked: HRL _____ / 9 Next level to work on: HRL _____

Notes & evidence Record the evidence behind each checked box, open questions, and who owns each follow-up.

Checklist condensed from ANSI/HFES 400-2021, Human Readiness Level Scale in the System Development Process (CC BY 4.0). Supports — does not replace — a formal HRL assessment by qualified human systems integration experts.

HEART Initiative, UW Madison College of Engineering, 2026