1030-32-116 Xianghong Gong\* (gong@math.wisc.edu), Department of Mathematics, University of Wisconsin-Madison, 480 Lincoln Dr., Madison, WI 53706, and Sidney M. Webster (webster@math.uchicago.edu), Department of Mathematics, University of Chicago, 5734 S. University Avenue, Chicago, IL 60637. Regularity for the integrability problem for almost CR vector bundles on strongly pseudoconvex real hypersurfaces. Preliminary report.

Let  $\omega$  be a square matrix of (0, 1)-forms on a strongly pseudoconvex smooth real hypersurface M in  $\mathbb{C}^n$ . Assume that  $\omega$  satisfies the formal integrability condition  $\overline{\partial}_b \omega = \omega \wedge \omega$ . We want to find a non-singular matrix A such that  $\overline{\partial}_b A = -A\omega$ . Assume that the dimension of M is at least seven. We will find local solutions A with sharp regularities in terms of the smoothness of  $\omega$ . (Received July 25, 2007)