









Operations Process As-Is Vulnerability: One person does all of BOM Vulnerability: Drawings truly kick-off the the production Production/Manufacturing KICK-OFF completed? process and they aren't received until scheduling for all Pinson handles: the ducts, Raw materials are not inventoried, spare 100% finalized... creates downstream facilities; need back-95% of dampers, fan parts are inventoried (Dennis maintains via inefficiencies; Engineering needs to up, structure and a housings, dust collectors, spreadsheet in Pelham South); will cut an progressively distribute pertinent documented metal expansion joints and intercompany PO for transfer of materials Engineering emails or information to initiate production methodology auger screws (cannot handle between locations physically hands off rotating equipment) drawings to the Production Manager The Production Manager The Production Manager Construction Operations The Production Manager reviews the BOM Field Operations reviews current Complete project Management coordinates Operations receives the "Engineerin Production/ will analyze the job and (focusing on long lead-time items); confirms All materials on Manufacturing/fab. Work production throughput/ executes; superintendent and mobilizes resources closeout; AR processes Job Traveler" and a Manufacturing Manufacturing Manager prioritize accordingly site? prepares daily report/fills Sub-contract? capacity at Pinson and commences Complete? (equipment and invoices older from the Sales admin. once a Job will insert key information (facility capacity, what has been purchased Pelham; prioritizes out daily time sheets personnel) onto schedule (excel) is approved experience and quantity in PBIS accordingly of staff) "Engineering" Requisitions are faxed/ Fab work is subemailed to production Oversee major contracted; Production Wait; bring up highfacilities according to type milestones and Manager oversees priority jobs in the weekly Vulnerability: No real-time visibility Denote on spreadsheet of work (i.e. dust collector Manual handoff project progression Monday meetings and wait for materials to regarding cost; progression material/components will (abide by (Accounting realizes cost after the ship to Pinson) arrive contractual fact; huge black hole exists during obligations) production) CNC programmer notifies CNC programmer will Shop Foreman and begin developing once Sub-contracted Paint, clean, Production Manager Burn, Cut, Mil drawings are received labor? prep when machine is ready Weakness/strength, Reference Commentary Handoff Progress through process Deviate Communication flow vulnera bility/ to another Database Start/End opportunity v process / Notes regarding Operations GAPS: overview 1. QC checkpoints are inconsistent; QC personnel do not have authority to stop production 2. no drying-booth, paint area is often a bottleneck area, obsolete inventory stored outside 3. manual handoffs between functional departments; production scheduling is ad-hoc and done by one 4. only one yearly physical; no stocking levels 5. not tracking machine down-time; maintenance scheduling is in place → need data driven and controlbased initiatives in order to run lean and drive productivity

6. no metrics regarding cycle times (some data is being gathered)

8. No performance metrics for shop floor (operators)

7. no true visibility into WIP (have to walk the floor); true cost is realized by Accounting during the project