Crashing Technique

By

Chris Goff

For Embry Riddle Aeronautical University

“Crashing” Technique

Project crashing is, “A technique used to shorten the schedule duration for the least incremental cost by adding resources. Crashing works only for activities on the critical path where additional resources will shorten the activity’s duration.” (PMI, 2013). Specifically targeting the project’s principal constraint, as outlined on the critical path of the original schedule, the “Subcontract A/E firm to design all system components” held the longest duration at 35.875 days.

With the existing utilization of the subcontracting strategy, instituting an additional crashing technique would include providing monetary incentives to the contractor to allot for means to compress their portion of the schedule; i.e., employee overtime, temporary additional manpower, etc.

With the existing demand of these custom bicycles, application of the aforementioned technique to this single constraint presented the most cost-effective approach to the compression of the project schedule. The resultant additional costs associated reduced this WBS element down to 25 days. This same methodology was used for WBS elements 1.1; order and inspect the frame set. Where in 1.1 we were able to streamline the completion and delivery 11 days ahead of schedule and 1.8 (smart phone speaker dock) duration was reduced due to the result of both initiatives above. Overall crashing efforts led to a compression of 27 days:

* Original ECD: 12 Jun 17
* Revised ECD: 16 May 17

The chart on the following page is the original Bicycle Planned Schedule, depicting the original start date of June 12, 2017.

/var/folders/5s/q3xr6yfj4_50gz_78m5yntkc0000gp/T/com.apple.Preview/com.apple.Preview.PasteboardItems/Bicycle WBS (dragged).pdf

/var/folders/5s/q3xr6yfj4_50gz_78m5yntkc0000gp/T/com.apple.Preview/com.apple.Preview.PasteboardItems/Bicycle WBS (dragged) 1.pdf