

ABSTRACT AND BIOGRAPHY

Mega Projects Estimates - A History of Denial

NASA purports to seek joint probable cost and schedule reality for our programs - yet we intentionally omit discernible risks from our comprehensive analyses studies. Underestimating risk vicissitudes (and consequently under-shooting cost and schedule projections) is a well verified NASA phenomenon. However, NASA rarely acknowledges publicly this pattern of aiming high and shooting low. Cost and schedule estimating candidness has proven difficult to come by. NASA should actively pursue a course that will change our prevailing reluctance to "tell it like it is in the cost and schedule world." The goal of this paper is to be a catalyst in facilitating that change.

In this publication, we will examine historical evidence relative to underestimating both costs and schedules for long-term NASA programs and other large scale projects. We will also look at how skewed confidence levels resulting from ultra-optimistic estimates can jeopardize program continuance. Furthermore, this study will examine detail accuracies and discuss methods of risk quantification. If the presentation seems to become too hard hitting at times, it is because we have followed the advice of Winston Churchill when he counseled: "If you have an important point to make, don't try to be subtle or clever. Use a pile driver. Hit the point once. Then come back and hit it again. Then hit it a third time - a tremendous whack."

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Glenn Butts is currently employed by NASA as a Cost Analysis Officer in the Kennedy Space Centers Chief Financial Office, and has prepared and reviewed construction cost estimates for everything from custom homes to jet engine test cells, and launch pads. He has been employed as Project Manager, Expediter, Chief Estimator, and Superintendent, worked as a consultant to commercial, industrial, and residential complex interests. He has owned and operated his own construction company and has successfully prepared estimates for the U.S. Army Corps of Engineers, Air Force, Navy, Marines, Boeing, The Washington Group, as well as various other general and sub-contractors.

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Honors Received: AACEI Total Cost Management, NASA Gold Dollar Award, NASA Space Flight Awareness Award, KSC Employee of the Year

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