

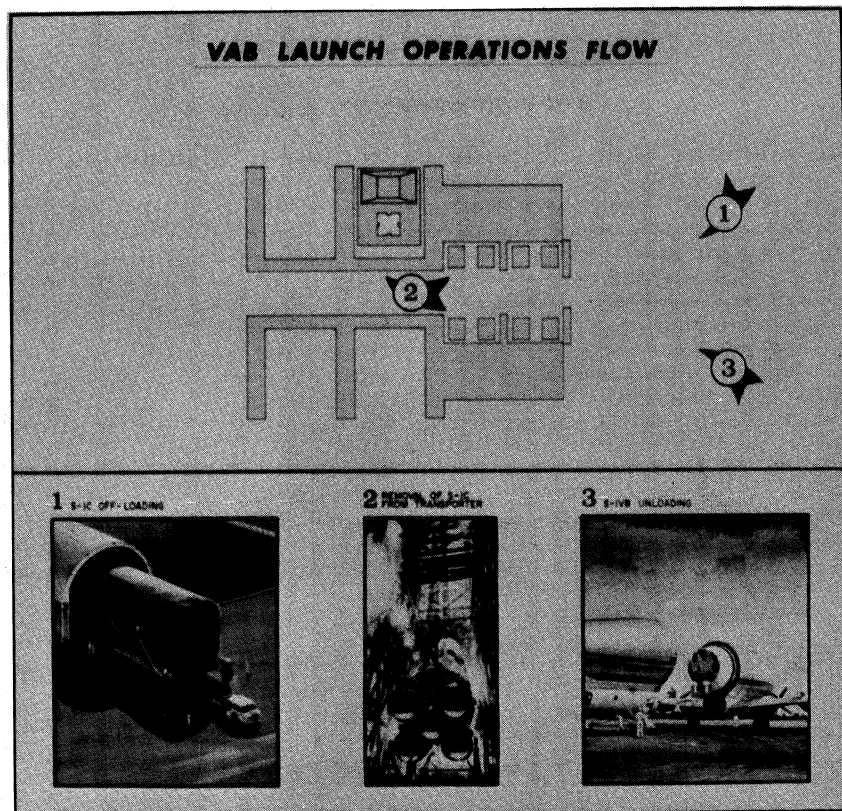


FIGURE B-10

arriving and going into the center aisle. Step 2 shows a stage arriving and going into the center aisle to be erected onto the launcher by a large crane. Our third stage (step 3), our instrument unit, and spacecraft can be flown in. The first and second stages must come by water. Step 4 shows operations on the second stage taking place here in the low bay before erection. Step 5 shows erection of the spacecraft itself, while step 6 illustrates the checked-out vehicle being transferred to the pad.

Figure B-12 shows the S-IC stage from below. This is the stage made by Boeing. The F-1 engines are visible in the photograph.

Figure B-13 shows the stage after erection sitting on four hold-down arms. The five engines are 10 feet below the deck of the launcher and the stage is being made ready for further cabling that has to be connected before proceeding with stage checkout.

Much of our time has to be taken up with physical assembly. The S-II has to be mated to its inner-stage units (fig. B-14) and then be bolted together on a table before erection. Normally, our work on the S-II stage would be about 7 to 10 days. In this specific case, we had some modifications to do prior to erection; however, the work was completed and the stage erected yesterday.