First a description of a drafting duck (also referred to as a whale) is required so that anyone born after about 1950 can understand this story. Before computers were invented, aeronautical engineers were designing airplanes on a drafting board by using French curves for small parts and splines for large parts. French curves are plastic templates for different curve families; curve #59 was well known as a good choice for drawing drag polars. A spline is a long, flexible, rectangular shaped piece of wood or plastic with a groove on one side. The spline is held in place at various positions on the drafting board by heavy lead weights that have a hooked protrusion that fit in the groove. The spline then conforms to a natural shape between these weights and the shape can be adjusted by moving the weights (see Figure 1). Because of their shape, these lead weights were called ducks (I think they look more like a mouse) and one of them weighs about 4 pounds!

![LEAD "DUCKS"

FIGURE 1.- Ducks and spline

A photograph of two ducks from the 16-Foot Transonic Tunnel is shown in Figure 2 (the hooked protrusion is missing from the top duck). These ducks (obviously stolen from Instrument Research Division or IRD) are still in existence and are located in a display cabinet in Building 1146. In actuality, only the bottom duck is from IRD; the upper “duck” was handmade out of balsa wood by someone (identity now lost to history) at the 16’TT to look exactly like the real duck. However, the upper “duck” only weighed a couple of ounces while the lower real duck weighed about 4 pounds. The following prank was played on almost every new employee and especially on Co-ops.
The real duck was handed to the new employee to let him handle it and feel the weight while it use was explained as above. After the perpetrator retrieved the real duck and started to walk away, he would suddenly turn and toss (rather forcibly) the balsa wood “duck” to the new employee. You can imagine the reaction that resulted.

FIGURE 2.- Photograph of two “ducks” from 16’ TT.

Origin of Flying Duck
(Submitted by Dick Re)

There was a time when NASA Langley was closely involved in the design of military aircraft and originated airplane designs to be compared performance-wise with company designs that were being proposed to the Air Force/US Navy. An attack or heavy fighter configuration was being detailed by another branch in the in the 16-Foot TT Operations Office (Ed Brummal's office). I don't think our branch was involved but we had several unused drafting tables available--left
over from the days when we used to design our own wind tunnel hardware and models. The person doing the work was using one of the drafting tables fairly close to two large windows that were in the wall between the Operations Office and a corridor. Whenever anyone from our office walked down the corridor, they passed the windows and were fairly close to the person using the drafting board. There was constant traffic passing the work-area going either to our office or to the men's restroom. Hank Heath, an office mate who prized his sense of humor, apparently knew the person doing the drafting work and decided to harass him on a continuing basis. Every time he passed the window he would do a parody of a then-popular Colgate toothpaste commercial on TV that claimed to protect your teeth with an invisible shield. He would knock on the window and say, "just as I am protected by this invisible shield, etc..." and go on his way. This repetitive behavior demanded a response by the person working at the drafting table, so he contrived retaliation. He was using 4-pound lead ducks in his design work and put some thought into a response for the annoyance. During lunch (he ate his lunch there) he got a block of balsa and went to work over a period of days and carved a replica of a duck, and painted it black. Visually, it was a duplicate, including the hook to hold the flexible spline on the drafting board, and the hand-painted white “IRD” on the top. He worked at the drafting table such that he sat with his side toward the two large windows. Then one day when Hank got to the window and started his "just as..... " routine, the draftsman turned suddenly, with the balsa duck cradled in both hands (like it was heavy), and heaved it at the window where Hank was tapping out his message. This startled Hank so much, fearing a 4-pound lead weight and shards of broken glass showering his face, that he jumped away from the window in full flight. Needless to say the balsa duck bounced harmlessly off the window and dropped to the floor. When Hank came back into the office he had a sheepish grin on his face and knew he had been had. The perpetrator enjoyed the effect immensely and said that all he could see when Hank saw the duck coming was "heels and elbows" as Hank took off. To add to the draftsman's satisfaction with his accomplishment, the next morning we saw the artificial representation of a broken window with cracks radiating outward from the center depicting breakage (this was skillfully drawn with a bar of soap). Our sense of humor was such that the "broken window" representation was allowed to stay for quite a long time after this event. It was a reminder each day of a very memorable prank as we passed down the hallway.