

all, the total amount devoted to "abnormal maintenance" since the program began through April 1963 has been about \$5,900,000.

The rental provisions bear special comment. Having determined, as we have seen, that a rental charge was appropriate, we were confronted with the question of how best to scale the rentals to achieve, on the one hand the best rate of return to the Government, while on the other hand to promote the maximum utilization of the presses.

With these considerations in mind and aware of the difficulties in the maintenance of accurate "time in use" records for each machine, we arrived at a rental geared to a percentage of sales, a commonly accepted commercial practice. This also minimized the need for close Government supervision of the press operator's day to day business and the administrative burden which it would entail. After extensive negotiations with the prospective press operators, the across-the-board rental rates were fixed generally at 4% of sales for products fabricated from the forging presses and from 4% to 5% for products coming off the extrusion presses, with a higher rate applied to those operators in possession of plants owned by the Government.

From the beginning of the program through the first quarter of calendar year 1963, our *net* rentals have amounted to some \$11 million. This can be accounted for in part by the fact that, in many cases, the rental did not begin to accrue until the presses were fully operational. In other cases, later cut backs in our aircraft programs reduced the utilization of these presses below our initial projections. And, finally we have offset some of the costs of "abnormal maintenance" in arriving at the net rental. All in all, however, it should be understood that our major reason for undertaking the heavy press program was not so much to increase the flow of revenues to the Government in the form of rentals but to provide a self-sustaining industrial base, with strong capabilities, so that important defense needs could be met with less cost and in less time.

For the future, we expect a steady rise in the rental returns, since our forecasts point to the increased utilization of the presses.

POSITIVE ACCOMPLISHMENTS OF THE HEAVY PRESS PROGRAM

To catalogue the significant accomplishments of the heavy press program is almost to relate the history of our modern advanced aircraft. A case in point is the "wet wing" for the B-52. Here the wing not only serves its traditional purpose aerodynamically, but is itself a large fuel tank that provides maximum range to this intercontinental strategic bomber. It was through the extrusions from our heavy presses that wing panels of the required strength and at reduced weight were produced, all at considerably less fabrication and machining cost that would have been possible by other methods. Although we have never completely analyzed the cost effectiveness impact of the presses on the B-52 program, we believe that the savings resulting from the forging and extrusion techniques have exceeded the entire cost of the heavy press program.

In addition to the B-52 wing skin panels, the products of our heavy presses have been used for a wide range of applications for the aerospace industry—from aircraft landing gears to bulkheads, from spars, jet engine parts, radar antennae, propeller blades, aircraft wheels, to various sections of missiles. Some of the major aircraft programs involved are the C-130, C-141, the F4C, and now the F-111. The J-52, J-57, J-75, JTFLO, J-79, J-58, and J-93 engines are similarly dependent upon the output of these presses. There are, as well, other programs equally important to the national security that substantially rely on the key contributions that our presses are making—Polaris carrying submarines, Army vehicles, Marine boats, pontoons, and aircraft landing mats, to name several. And, as new programs are unveiled, the heavy presses will continue to provide basic support in the form of strong, light-weight components not as satisfactorily produced by other means.

AIR FORCE MANAGEMENT OF THE PRESS PROGRAM

The Air Force has subjected the heavy press program to continual surveillance in an attempt to improve its management techniques and contracting procedures. Our efforts have intensified over the past two years. Particularly noteworthy, in this regard, has been the work of the Air Force Systems Command Heavy Press Task Force. We are always in the market for constructive suggestions, and you