Editorial

THE POWERPLANT PROBLEM

There is a new preoccupation in the U.K. — probably the psychiatrists would say it is a rebellion against domination by the phallic symbols of the missile age — with the idea that true manpowered flight is possible. Ever since man first thought of flying, he has dreamed of doing it in the same manner as the birds. The dream has never been realized, but now one British enthusiast, Henry Kremer, is so certain that it is possible that he has put up a prize worth about \$13,500 to be awarded in recognition of the first successful British man-powered flight in the British Commonwealth.

A basic problem is to find a powerplant/pilot who combines lightness with superior athletic ability. We understand that an athlete in top condition can momentarily develop a peak power of from three to five hp, this falling off within seconds to .5 hp. Boosted by oxygen, such an ornithopter powerplant/pilot can produce higher and/or more sustained powers. Obviously this is a very poor power/weight ratio and it indicates to us that the enthusiasts will have to revise their basic thinking with respect to the powerplant problem.

We think the ranks of the fullgrown male athletes is the wrong place to look for the solution to the powerplant/pilot problem. We seek no reward or honor in suggesting that the search be turned in the direction of small children. Anybody who has ever watched a three-year-old play for a day knows that one can develop a guaranteed five horsepower for indefinite periods. At a ready-torun weight of 30-35 lb., such a child can offer a vastly superior power/weight ratio to that of a full-grown man. And where else can you get a powerplant with a lead time from conception to first prototype of just nine months?

Well, back to the drawing board.

COSTLY CHAOS

It is no wonder that more and more intelligent, thinking people are throwing their hands up in hopeless confusion over the fantastic air defence muddle in Canada and the U.S., and suggesting that all defence funds be channelled into forms of peaceful aid to underdeveloped countries.

Contradictory: Beginning in February of this year and particularly in recent weeks, the North American citizenry has been buffeted from all sides by contradictory decisions and expert opinions, among them being:

•The cancellation in February of the Avro Arrow, because "the manned bomber threat is diminishing", and the substitution of a token but extremely costly missile anti-bomber defence system which, it now appears, will not be operational any sooner than the Arrow would have been.

•The cancellation by the U.S. of the F-108 fighter as, the USAF emphatically declares, an economy move. The U.S. defence budget could not support both the F-108 and the wide assortment of missiles to which the U.S. seems committed. The missile proponents won the day. The F-108 cancellation seemed to back up Prime Minister Diefenbaker's decision to dump the Arrow until . . .

•General Laurence Kuter, commander of NORAD, expressed the hope in Ottawa recently that Canada was planning to replace its CF-100's with a more modern aircraft, saying: "As long as war is fought in the air we will require men in the air . . . I see no point ever when there will not be a real requirement for a fighting man in the air."

•The virtual emasculation of the USAF's vital Mach 3 strategic bomber program against what has been described as bitter opposition by the USAF; this has been effected by an imposed budget decision to stretch out the B-70 program by cutting development funds to less than half those required.

It is becoming clear that the airmen, who were never able fully to convince governments that war could be won by air power alone, have had their arguments adopted and adapted by the missilemen and turned on them with such effectiveness that the U.S. government at least is being sold on the idea that wars can be won by missiles alone. The airmen seem to be losing an incredible game of one-upmanship.

Squeeze Play: What makes the defence chaos particularly hard for the citizens of Canada and the U.S. to bear is that total defence costs are not being reduced. What is happening is that because of rising costs, more and more funds are being required for salaries, wages and allowances, housekeeping and maintenance services.

There is a ceiling on defence budgets in both countries, so this means less and less money is available for development and production programs. If the trend continues, we shall have large bodies of service people . . . well clothed, well fed and well housed . . . but with no weapons worthy of the name.

North American air defence (including the USAF's offensive capability) might be likened to a giant, sick in body and wandering in mind, staggering along with no particular destination evident; sums of money so vast that they boggle the imagination are being expended to try and bring the giant back to sound health again, but to no effect. Is there a good doctor in the house?