

#1. Expensive, if QB-17's are used,
performance is unrealistic, if
smaller drones Q-2 or QF-80 some
form of FE1 must be used, definitely
limited number of QB-17's + QF-80's
Q-2 is still an unknown since
it has yet to be tested—

(B-29 + B-45)

#2 IF conventional tow craft are
used this method is ~~not~~ unrealistic
in performance - Towing at 15,000, which
no one is yet convinced is a safe minimum,
is an untried art but ^{judging} ~~judging~~ from past
difficulties with 5,000' tow it will be
an extremely complex and difficult operation.
Even though high performance ~~#~~ Tow
craft are proposed ~~to~~ they are far from
an actuality. At ~~present~~ present there is

to my knowledge only one reel in the foreseeable future capable of such cable lengths and that is an untested item - Cable drag will be an ^{important} ~~interesting~~ factor - at 300 knots ~~at~~ 5000' of $\frac{3}{8}$ " ^{it} is on the order of 350 lbs. - 15,000 ft will be $\frac{1}{2}$ ton and this increases as the square of the velocity.

3- ~~This proposal has all the drawbacks of the previous system plus some~~ ~~as a~~
 This ~~has~~ proposal has all the drawbacks of the previous system plus a few peculiar to itself. There is the possibility of ^{sizeable} radar return from the camera vehicle itself which would present an unrealistic ~~to~~ picture to the bird - Additional problems of ~~remote~~ telemetered camera operation and recovery of film in event of camera vehicle damage or loss - Almost every element here is untested -

4- properly trimmed 3
A low drag winged glider would be towed to altitude and released. Quoted figures on one available target are a 90 miles glide distance from 45,000' at mach .82.

This would afford time for one or two passes at realistic speeds. ^{Targets would be recovered by chutes.} Low effort could be a standard fighter such as an 86-H.

Further possibilities are control of target thru limited maneuvers and multiple target capability.

~~Proposed~~ Proposed F.E.1 is a Radar-Optic scoring or target mounted F.E.1 such as a planar camera or Kinescope. System is untried as an operational unit. Elements ^{of it} have been tested.

5- ~~System~~ A QF-80 is here towing an air launched low drag target ^{in shape} similar to 'frangibles' now under development. Reel could be an extremely simple under wing affair or possibly in the target itself. Tow distance

would be just sufficient to effect ^{reasonable} recent target separation. Flare in tail may not be essential if ~~so~~ ^{were however it} it could be actuated by an aneroid device as a function of air speed or by and extremely simple telemetry rig.

~~Proposed~~ Assumed scoring is by Radar-Optic I.C.D. Almost all elements of this proposal ^{to some extent} simply + implemented have been tested. It could be easily implemented.

#6 This is merely an elaboration of the previous system to provide multiple target capability. Targets are reportedly capable of being trimmed to fly ~~in~~ with large lateral displacements from the tow craft. Cable lengths could also be varied.

#7 Test set used for preliminary studies of possibility of Radar Optic Scoring for the Falcon - Photos are frames from strike & A scope films -