Jaeger Squadron (X)

Jaegers (Dutch for "Hunter") are Rapacious Birds of Prey --

Aerial Marauders that Range Far Out to Sea,

Yet Seek Out and Destroy their Prey in Coastal Regions.

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Introduction

Jaeger Squadron (X) offers the Department of the Navy a low-cost, low-risk opportunity to explore significant changes to combined-arms tactics and operations within the DoN's existing institutional framework.

The changing strategic situation, coupled with the prospect of a long-term budget squeeze (which is the consequence of the reduced threats of the post-cold war era *and* a more restrictive fiscal policy), puts a premium on lower-cost, agile expeditionary forces capable of rapid and repeated insertions and extractions along coastal regions.

Jaeger Squadron (X) is a low-cost initiative to discover new opportunities to enhance the effectiveness of carrier-based aviation in littoral warfare. Expeditionary forces tend to be most vulnerable to an aggressive adversary's countermoves during the various stages of amphibious operations, when ground forces are building up or reducing their organic combat power ashore and operational restrictions are constraining the mobility of supporting surface ships. During these transition stages, Marines will depend on sea-based fire support and carrier-based aviation, while vulnerable amphibious ships will depend on aviation and surface warships for reconnaissance, identification, screening, and protection.

Mission

Jaeger Squadron (X) will serve as an "operational laboratory" to develop and evaluate the Jaeger Aviation concept described in enclosure (1). Its five-year mission will be to evolve the knowledge and understanding essential to effective air/surface tactical schemes through a series of operational experiments.

The main focus of the Jaeger (X) experiments will be to determine if Jaeger Aviation significantly improves the effectiveness of combined-arms warfighting operations. Experiments during the first three years will seek to uncover the most effective tactical repertoires *and* the enabling command and coordination relationships. Depending on the results, the last two years of experiments may be expanded to include investigations into the nature of Jaeger hardware requirements, such as maneuvering performance, fast versus slow speed, high versus low altitude, desired munitions' effects (suppressive as well as lethal), survivability, integration with command and coordination systems, electronic warfare, etc.

Taken together, the five-year experimental architecture will take the form of a series of progressively complex, free-play, combined-arms exercises with Marines and/or surface combatants in a variety of littoral warfare scenarios.

Viewed as a creative or synthetic process, the Jaeger (X) test and evaluation program becomes an open-ended conceptual spiral, with each successive experiment and conceptual refinement evolving naturally out of the analyses of the successes and failures of its predecessors. This creative process would enable line operators (airmen, marines, and sailors) to progressively

discover and refine their operational requirements in terms of empirically-validated *combat tasks* and thereby provide a user-designed framework to --

1. Understand and define the warfighting effectiveness of existing tactics and weapons;
2. Discover and evaluate the effectiveness of new tactical or operational opportunities;
3. Assess the strengths and weakness of tactics, command and control arrangements, and weapons in terms of capabilities to accomplish combat tasks;
4. Identify and analyze how well proposed tactics and weapons reduce existing deficiencies;
5. Shape and prioritize emerging technologies to insure that the R&D program responds to, supports, and reinforces the variety of human-centered warfighting tasks.

The Jaeger (X) experiments would also have a serendipitous payoff: They will serve as a low-cost prototype of an Operational Research and Development, Test and Evaluation (ORDT&E) program. The lessons learned from this ORDT&E prototype experiment should help the managers of the Warfighting Laboratory to refine the experimental architectures of their future R&D projects.

Jaeger (X) Philosophy

Apply the scientific method (a repetitive cycle of observations-hypothesis-test) in a realistic operational setting to assure that *Form Follows Function.*

Operating Principles

- Air/Ground Teams (Operators) will use what they have to discover what they need.
- Operators will evolve command and coordination procedures by using *Mission Orders* and *Commander's Intent* to quickly shape and adapt Jaeger operations to sudden changes in combat conditions without losing the initiative.
- Operators will evolve the combat tasks--i.e., the hypotheses to be validated via testing.
- The experimental design of each exercise will permit *Free Play* by both sides to insure that the opposing side has maximum opportunity to counter the effectiveness of Jaeger operations. The concept of *free play* is absolutely essential to these tests, because it will maximize the possibility of rejecting the Jaeger hypotheses and thereby maintain scientific discipline. For a scientific test to have any meaning, it must be designed in such a way that the hypothesis or prediction can be easily rejected if the underlying theory or concept is flawed. In this context, the empirical validation of any combat task in one experiment must always be viewed as tentative and subject to rejection if it fails further tests. The Jaeger (X) program will be designed to apply this basic principle by rigorously using *free play* engagement dynamics within an expanding spiral of progressively challenging tests.
- Low Cost: Jaeger Squadron (X) will use Spartan facilities and existing equipment.
- Lean: De-centralized project team (headed by Navy O-5) will be placed under the existing Sea Dragon organizational structure.
- Five year duration -- no long term commitments.
- Jaeger operations will be integrated into existing exercise schedules where possible.
- Active/Reserve Participation (minimal disruption to personnel system).

Project Timeline (Tentative)

1st Year--Education & Preliminary Training

- Naval aviators develop a more complete understanding of surface combat (ashore and afloat) to include increased air/surface integration in context of mission orders, fast O-O-D-A loops, and maneuver warfare tactics.
- Naval aviators participate in ground warfare training and deploy with ground units in operational exercises.
- Naval aviators begin high-initiative, de-centralized air participation in the combined arms team in small-scale tactical exercises.

2nd Year--Integration of Jaeger (X) at Tactical Level of Combined-Arms Warfare

- Develop and integrate Jaeger tactics with company and battalion size organizations.

3rd Year--Integration of Jaeger (X) at Operational Level of Combined-Arms Warfare

- Develop and integrate Jaeger operations with naval expeditionary forces

4th Year--Operational Evaluation (notional)

- Develop and Integrate Jaeger (X) with naval expeditionary force.

5th Year--Assessment and Transition or Termination

- Prepare final report with recommendations.
- Decision: Continue, Modify, Terminate.

Aircraft Options

- T-34 option (lowest-cost option)
  - 1st Year: 8 pilots, 4 observers, 4 infantry, 6 aircraft
  - Years 2-5: 16 pilots, 4 observers, 4 infantry, 12 aircraft
  - Flying Costs--Total Squadron O&M: About $2M for five years (source: contract maintenance costs at Cecil Field)
    1. 1st Year: (Aircraft - $105K/yr) + (Fhrs - $110K/yr) = $215K/yr
    2. Years 2-5: (Aircraft - $210K/yr) + (Fhrs - $220 K/yr) = $430K/yr
    3. Additional costs: range costs, salaries of uniformed personnel, travel expenses, support equipment, organizational overhead, etc.
- Other higher-cost possibilities: OV-10, T-28, TA-4, F-18

Guidance and Educational Development

Establish a Senior Mentor Panel composed of "Wise Men" in Maneuver Warfare to periodically review and guide the progress of Jaeger (X). Personnel recommendations: General Al Gray (USMC Ret.), Col. John Boyd (USAF Ret.), Col. Mike Wyly (USMC Ret.), Mr. Charles E. Myers.

Establish quarterly combined-arms seminars (modeled after the Air Pac workshops) under the auspices of the Sea Dragon-Jaeger (X) Organization (perhaps in conjunction with the Office of Marine Corps History or the Naval War College) to stimulate the continuing flow of new ideas and debate from among a variety of Naval and Marine officers, DoD civilians, civilian defense experts from think tanks and academia. At each seminar, one session would be devoted to discussions with an individual with actual combat experience with the objective of learning from his experiences and relating his experiences to our challenges. These individuals should be drawn from as broad a spectrum of historical experience and culture as possible--for example, a representative of Royal Navy with Falklands experience, a Ranger who was in the firefight in Mogadishu, a P-47 pilot who flew ground support for Patton in WWII, sailor who sailed with Arleigh Burke, a marine who flew Corsairs in support of the retreat from Chosen Reservoir, an Afghan Mujahadeen, a former member of the Viet Cong, etc.

Concluding Remarks

Jaeger Squadron (X), an innovative test squadron sponsored by the Commandant's Warfighting Laboratory, would provide the DoN with a low-cost opportunity to investigate a potentially high value-added capability. The knowledge gained from the Jaeger experiments will help integrate carrier-based aviation with naval combatants and Marines into a true combined-arms team for waging expeditionary warfare in the 21st Century. The results of these experiments--the failures as well as the successes--will have three doctrinal benefits: (1) they will help to validate the emerging theory of "Operational Maneuver From the Sea;" (2) they will broaden our understanding of the carrier's capability to support the evolving post-Cold War naval doctrine of "Forward ... From the Sea;" and (3) they will validate the theory of compensating leverage for naval expeditionary forces (as envisioned in the Commandant's Planning Guidance).

If successful, the Jaeger Squadron (X) experiments will also generate much of the information needed to quickly field carrier-based Jaeger regiments. This aerial enabling force will be designed to lubricate the insertion and extraction of friendly ground forces along the world's littorals. Marauding Jaegers will enhance the capability of friendly ground forces to wage maneuver warfare during the crucial transition stages of amphibious operations. They will reach outward to probe and test the enemy, locate and identify his forces, impede or paralyze his movements, wreck his command, control, and communications, and attack through his weaknesses to shatter his cohesion and bring about his collapse. Viewed from this perspective, Jaeger Aviation will be the operational bridge linking naval forces attacking from the sea with the traditional Marine Air Ground Task Force.